# HDMI® A/V over Gigabit Ethernet Adapter

## User's Manual

## ABOUT THIS MANUAL

This manual is designed for use with the HDMI® A/V over Gigabit Ethernet Adapter. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

## SAFETY INSTRUCTIONS

Always read the safety instructions carefully:

■ Keep this User's Manual for future reference

■ Keep this equipment away from humidity

■ If any of the following situation arises, get the equipment checked by a service technician:

 • The equipment has been exposed to moisture.

 • The equipment has been dropped and damaged.

 • The equipment has obvious sign of breakage.

 • The equipment has not been working well or you cannot get it to work according to the User's Manual.

## COPYRIGHT

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# Table of Contents

# 1. Introduction

The **HDMI® A/V over Gigabit Ethernet Adapter** enables you easily to connect monitor and projector from a computer. You may perform a high quality presentation and DVD video by high throughput of Gigabit Ethernet and have the content of your PC get access remotely. The display stations can be up 100 meters away from your computer with CAT6 cable. With this adapter; you can just use one monitor to control 4 different computers as Net KVM application.
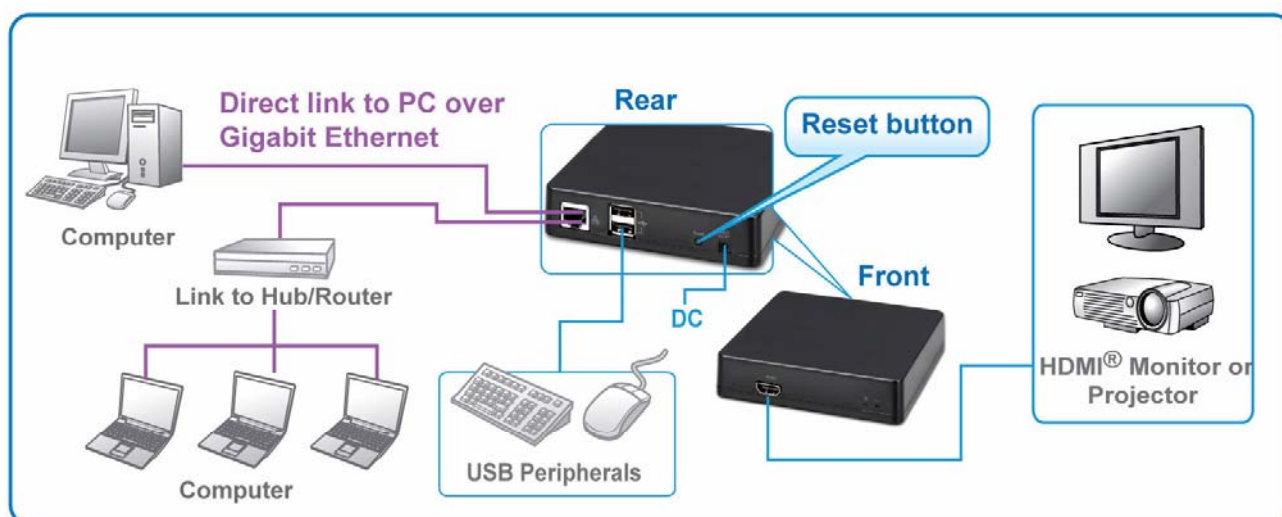


## Home Application

It can extend the content of PC from one monitor to another. Parents and children are able to watch different content of PC or labtop by the adapter.
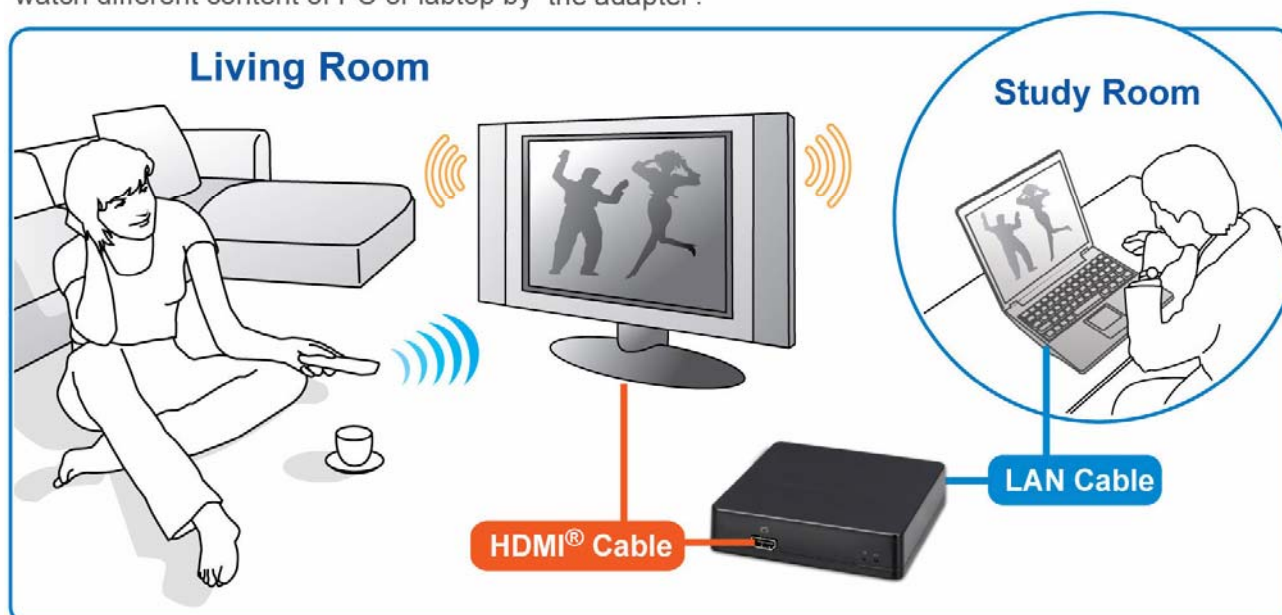
# Features

- Compatible with Gigabit Ethernet specification.
- Video applications on LCD monitor or projector shared through Gigabit Ethernet port.
- Display remote control.
- Compatible with USB 1.1/2.0 specification.
- Support resolution up to 1080p.
- Input: Gigabit Ethernet interface; Output: HDMI® interface.
- Long transmission distance up to 100 meters.
- Plug and play.

# Package Contents

| | |
|---|---|
| HDMI® A/V over Gigabit Ethernet Adapter | x1 |
| Power Adapter | x1 |
| CD (Driver and User's Manual) | x1 |
| Quick Installation Guide | x1 |

# System Requirements

- Windows® XP, Windows Vista® 32/64 bits and Windows® 7 32/64 bit

# LED Status

| LED | Color | Description |
|---|---|---|
| Power | Green | On for connected to the power adapter<br>Off for not connected to the power adapter |
| Link | Blue | LAN activity. Blinking when there is data flow between LAN and the host computer |

# 2. Installation

## Hardware Connection

**Connect to HDMI$^{\circledR}$ monitor / projector**

**Power Indicator**

**LINK (LAN Connection) Indicator**

**Two downstream USB ports**

**Reset button**

**Connect to the Ethernet with RJ45 cable (LAN Port)**

**Connect to the power adapter**
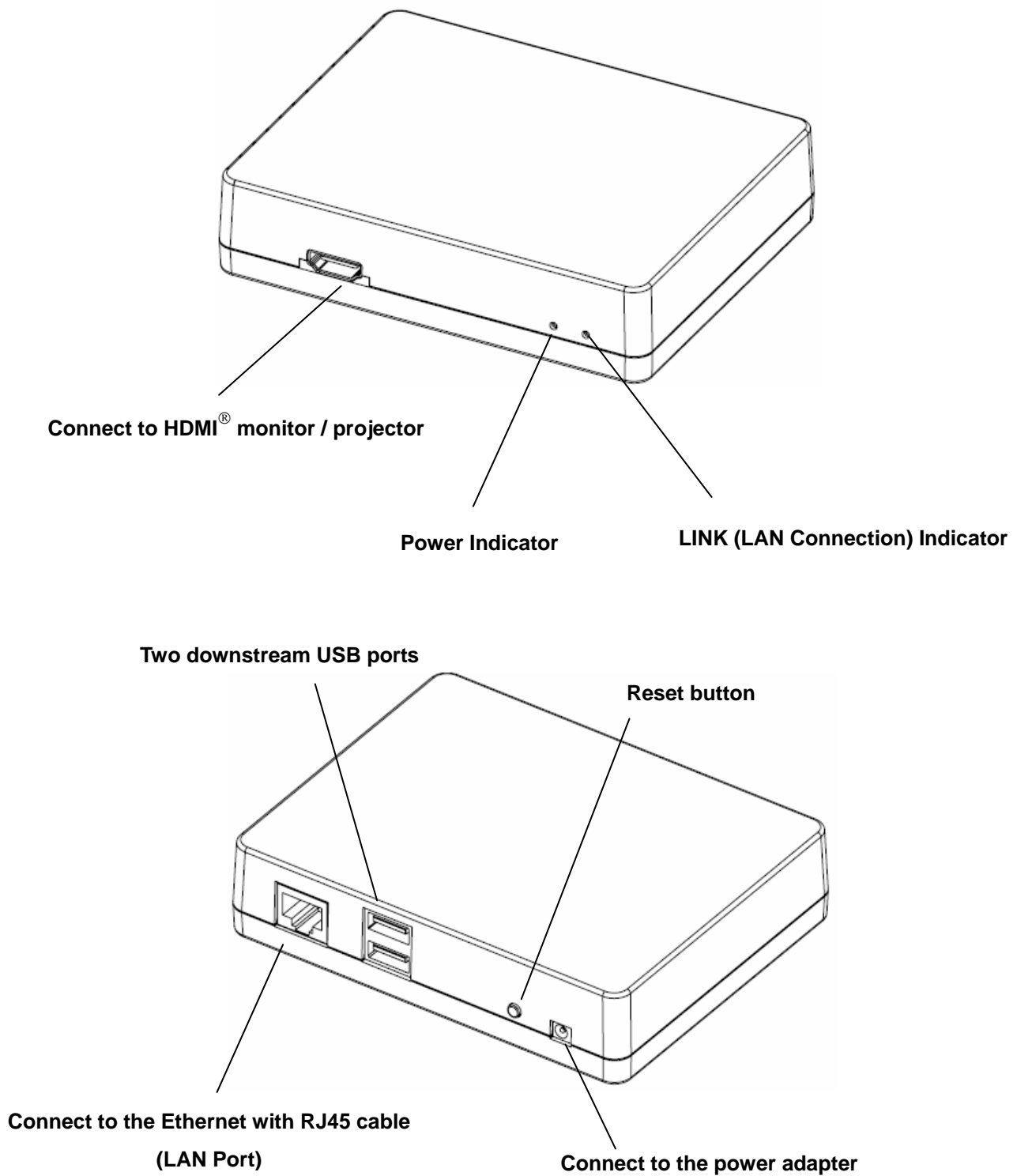
# Driver Installation

## On Windows® XP

**Caution: DO NOT** connect the adapter to your computer before installing the driver on the provided CD.

1. Insert the provided CD into your disc drive. It is normal that the screen will flick black a couple of times during the installation. When finished, the installation screen will disappear, and you can see the screen as below.
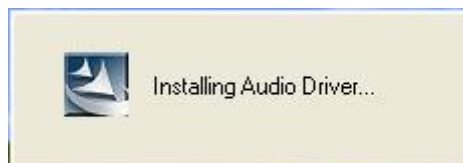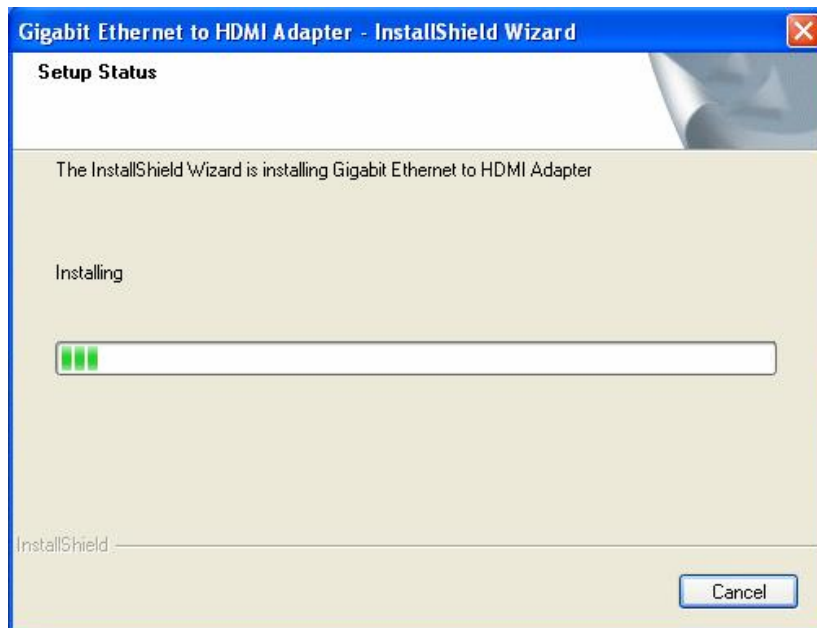
2. When the **Install DisplayLink Software** screen appears, select **I accept** the terms in the license agreement.
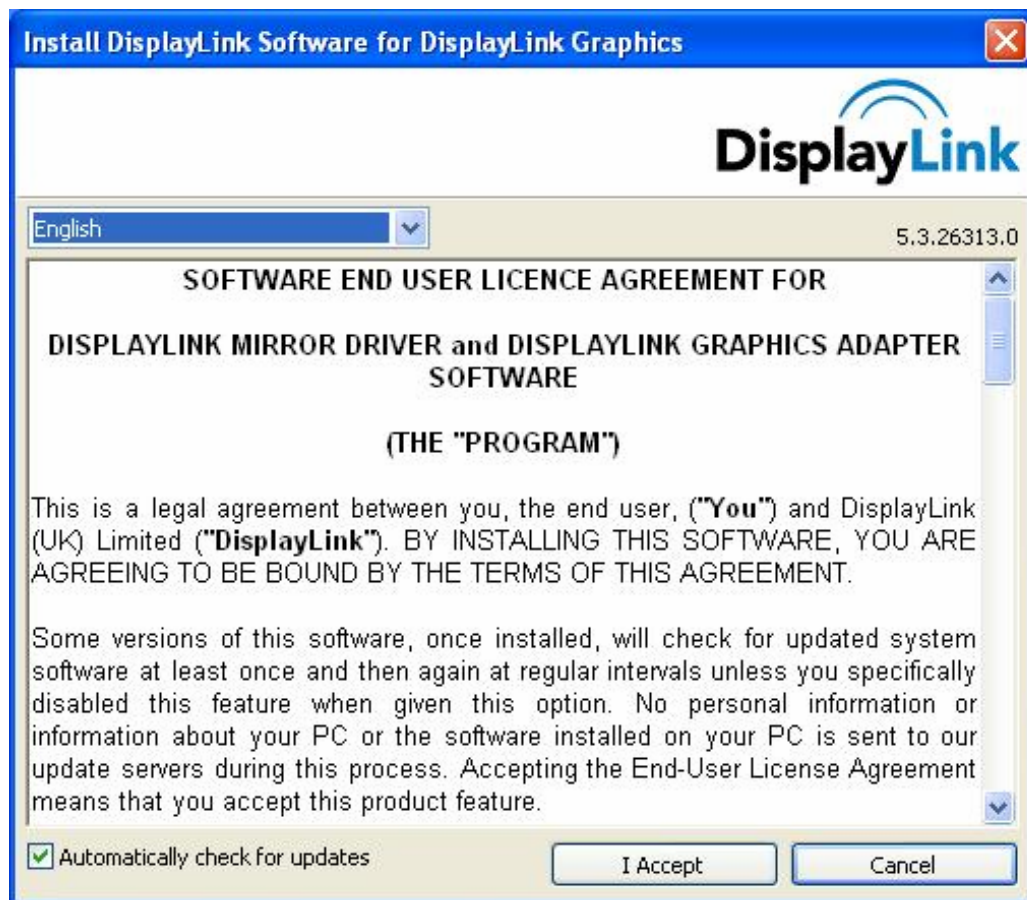


3. Please wait while Windows configures DisplayLink Core Software. Your screens may temporarily go black or flash during this process.

4. After the DisplayLink software was installed, the **USB PnP Sound Device** installation will appear.
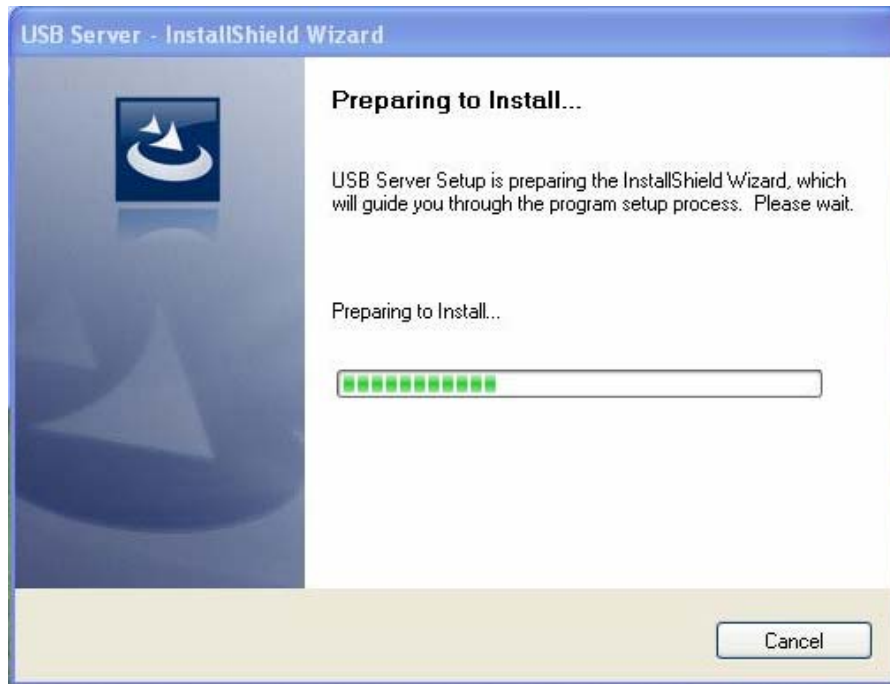


Note: The Software Installation Window may appear, please click **Continue Anyway**.

5. Setup has finished installing USB Server on your computer, please click **Finish** .
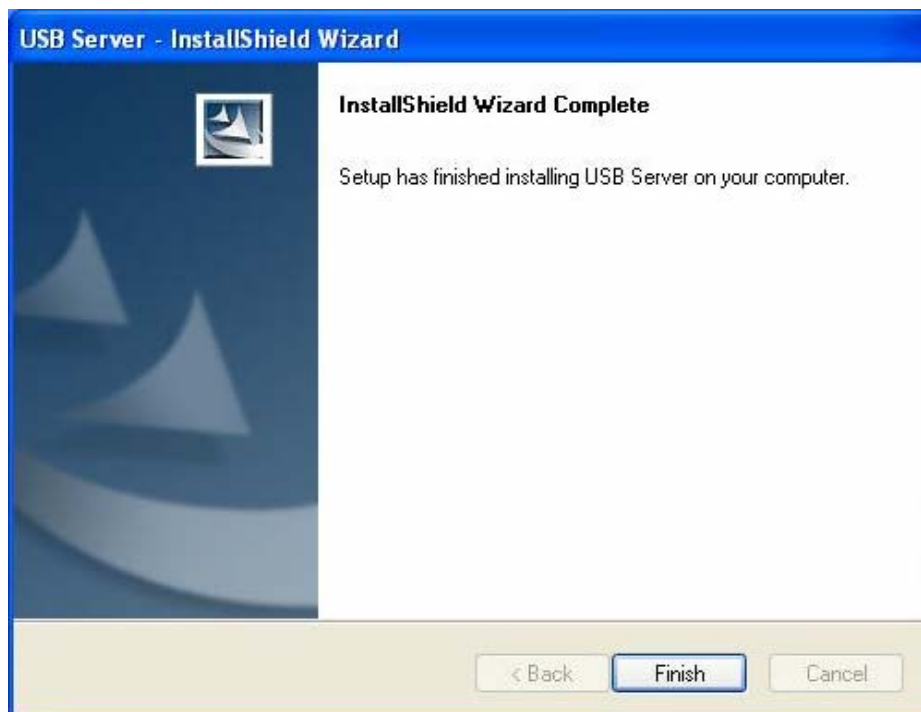
6. The InstallShield Wizard has successfully installed USB Server. Before you can use the program, you must restart your computer. Please click "**Yes, I want to restart my computer now**" and click **Finish**.
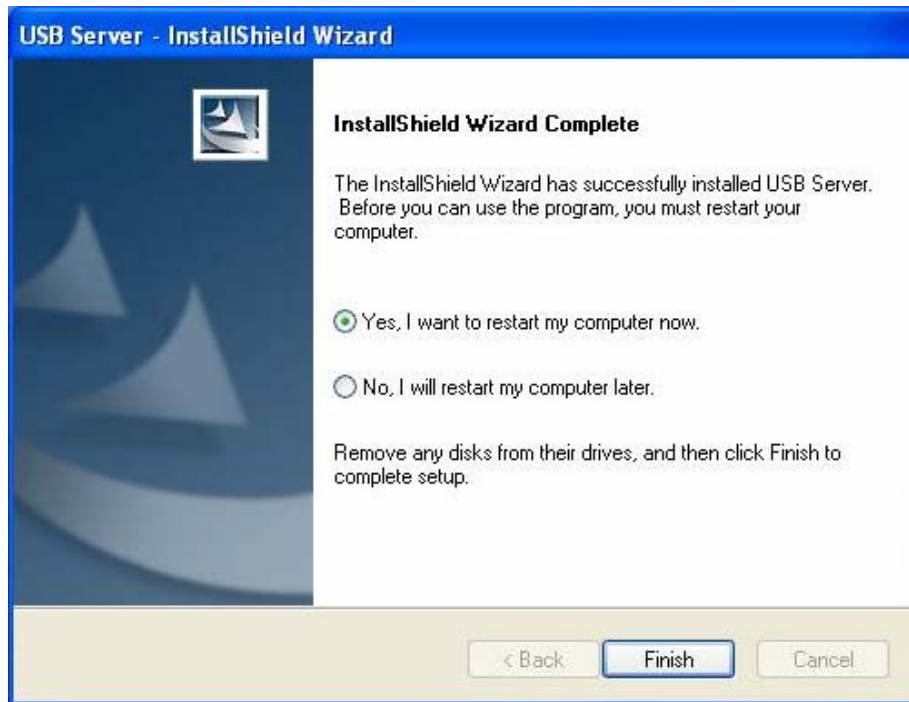


7. Please plug power cable into HDMI® A/V over Gigabit Ethernet Adapter and connect the LAN port of the Ethernet adapter end to a free Router.

   After restart the OS, the **Windows Security Window** may appear when making connection. Please click "**Unblock**" button to make connection.

8. Please Double-click the shortcut icon of **Launch USB Server** on the desktop.
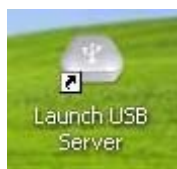
9. The Found New Hardware Wizard Window will appear, please choose" **Yes, this time only**" and click **Next**.



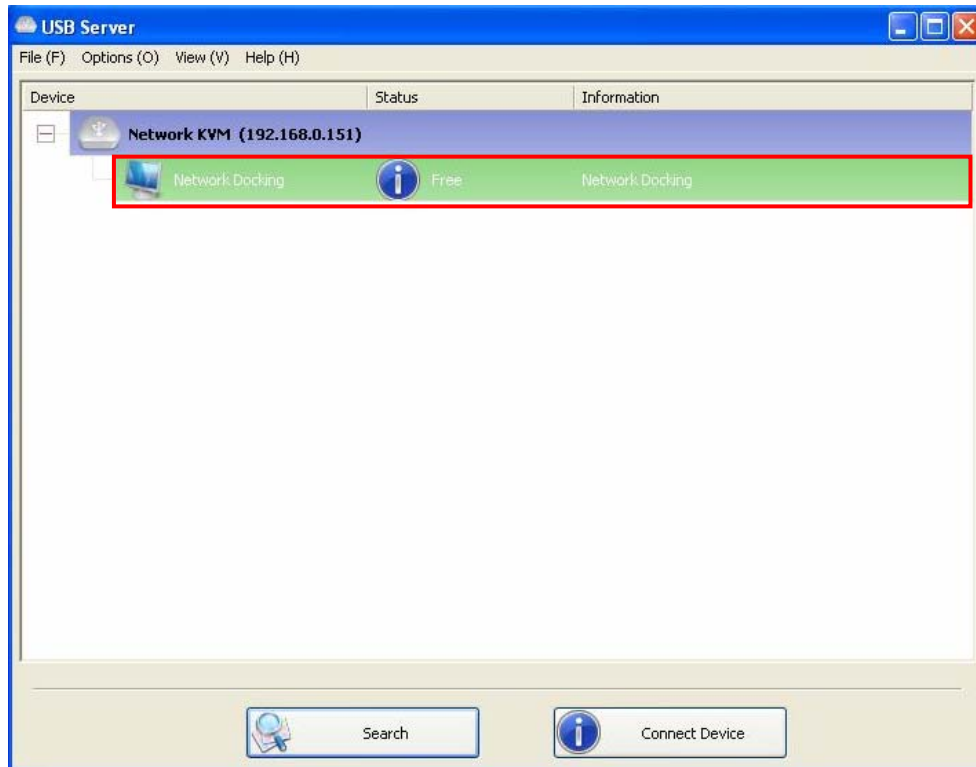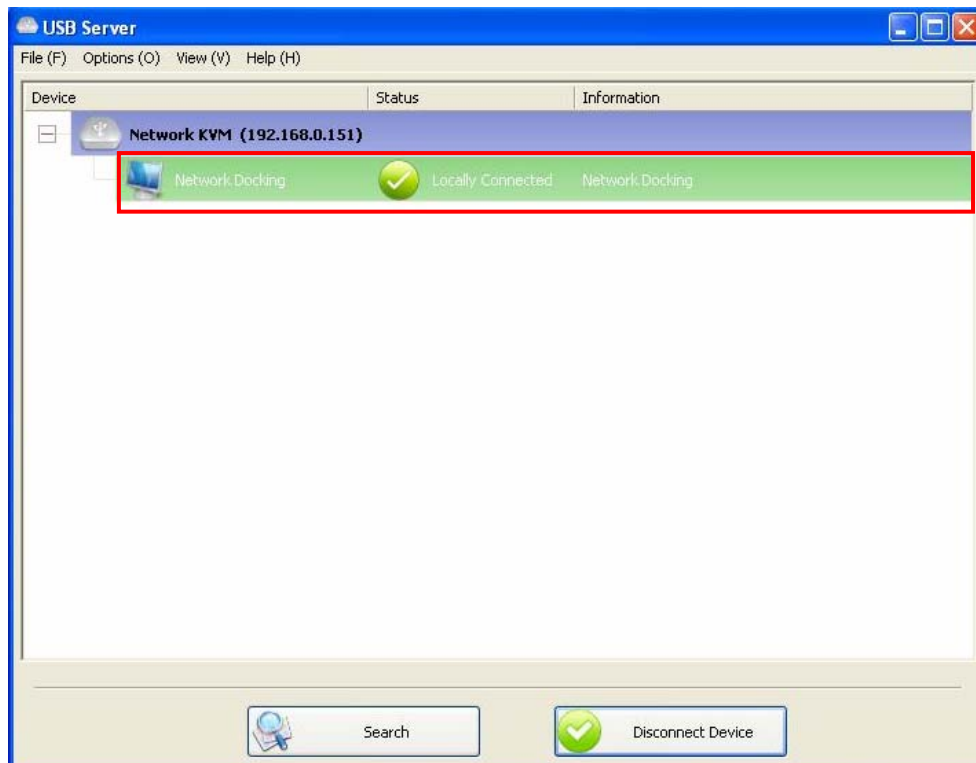10. Please choose "**Install the software automatically**" and click **Next**.
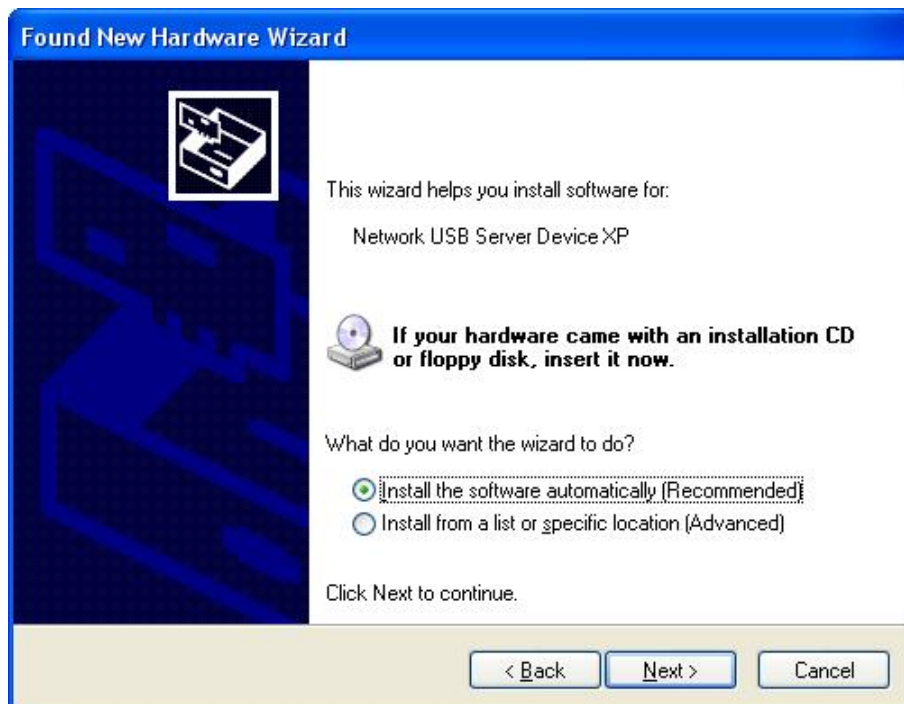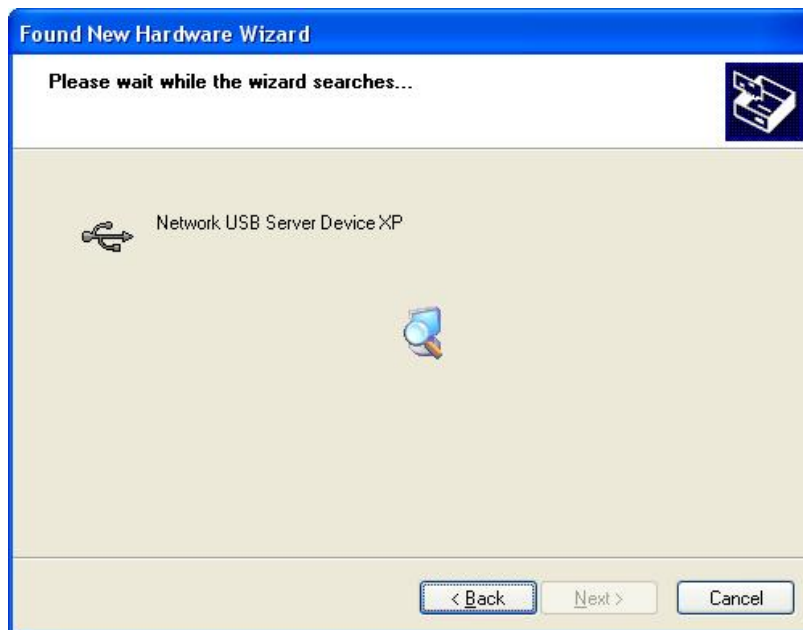
11. Please click **Finish** to close the wizard.

12. Please click "**Connect Device**" when a device is selected.



13. When the device is connected, the check mark will be green.



14. When the System Settings Changes Dialog Box appear, please click "**Yes**" button to take the new settings effect.

*Actual strings depend on your operation system. These screen shots are from Windows® XP and might vary slightly for each operation system.

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# On Windows Vista® / Windows® 7

**Caution: DO NOT** connect the adapter to your computer before installing the driver on the provided CD.

1.  Insert the provided CD into your disc drive. Locate and double-click the **Run autorun.exe** file in the **Driver** folder to launch the setup program.
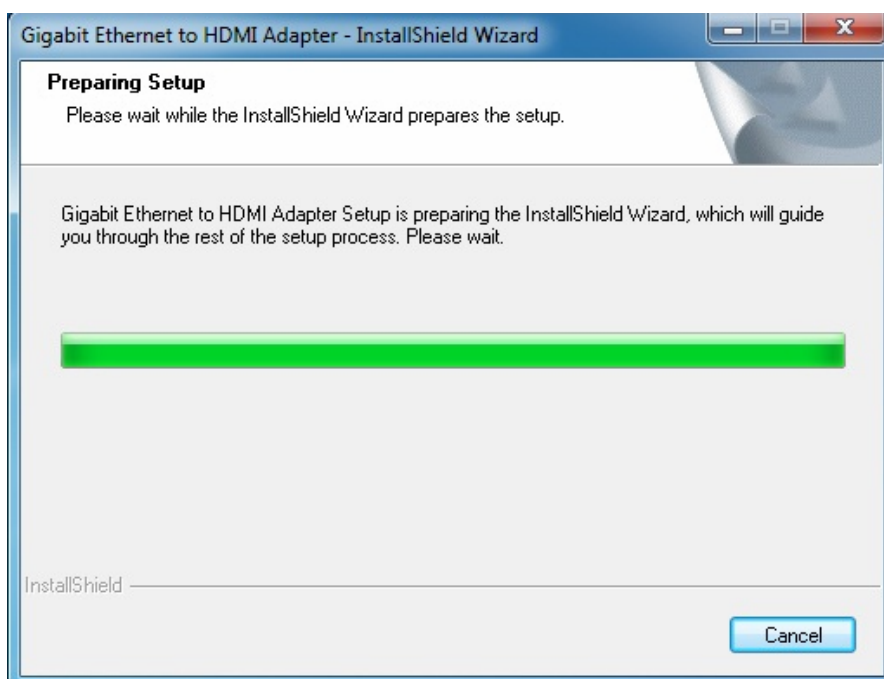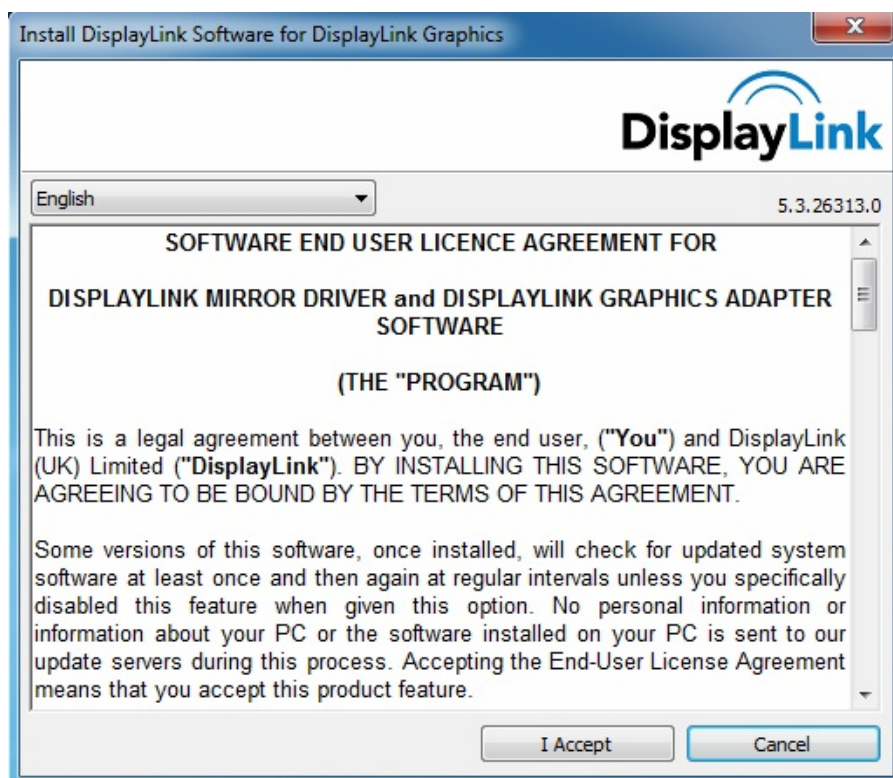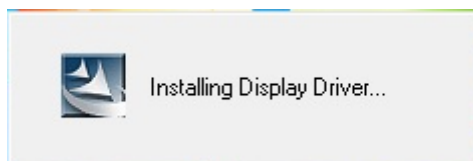
**Note**：

If the installer program doesn't run automatically, please locate and double-click on the **Setup.exe** file in the **Driver** folder to launch the setup program.

If you encounter a **User Account Control** dialog box when attempting to install a program, enter an administrator password or click **Allow/Yes** to start the installation.
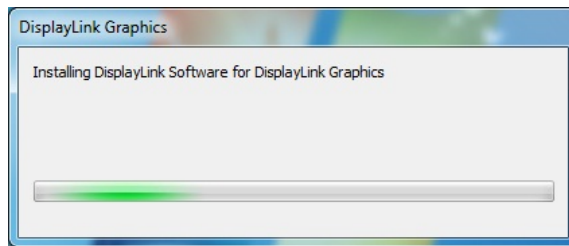
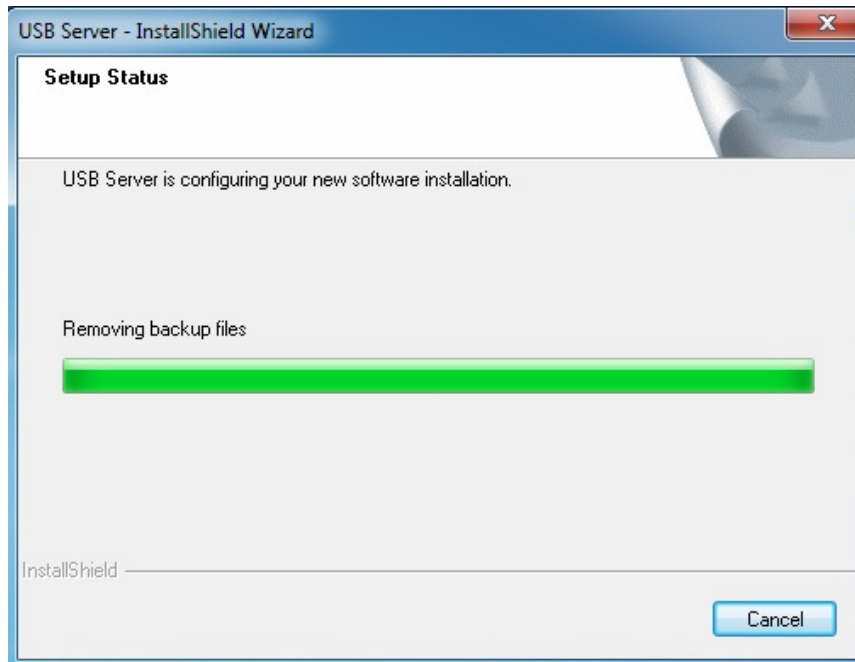2. Please choose "**No, I will restart my computer later**" and click **Finish**.
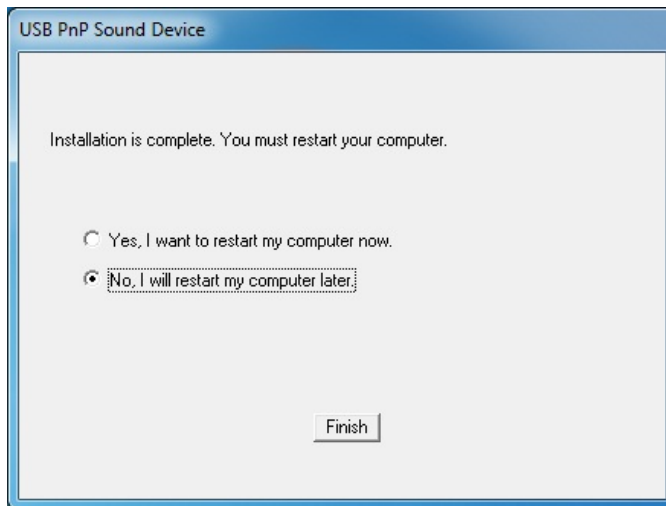




3. When the **Install DisplayLink Software** screen appears, select **I accept** the terms in the license agreement.

4. Please wait while Windows configures DisplayLink Graphics. Your screens may temporarily go black or flash during this process.
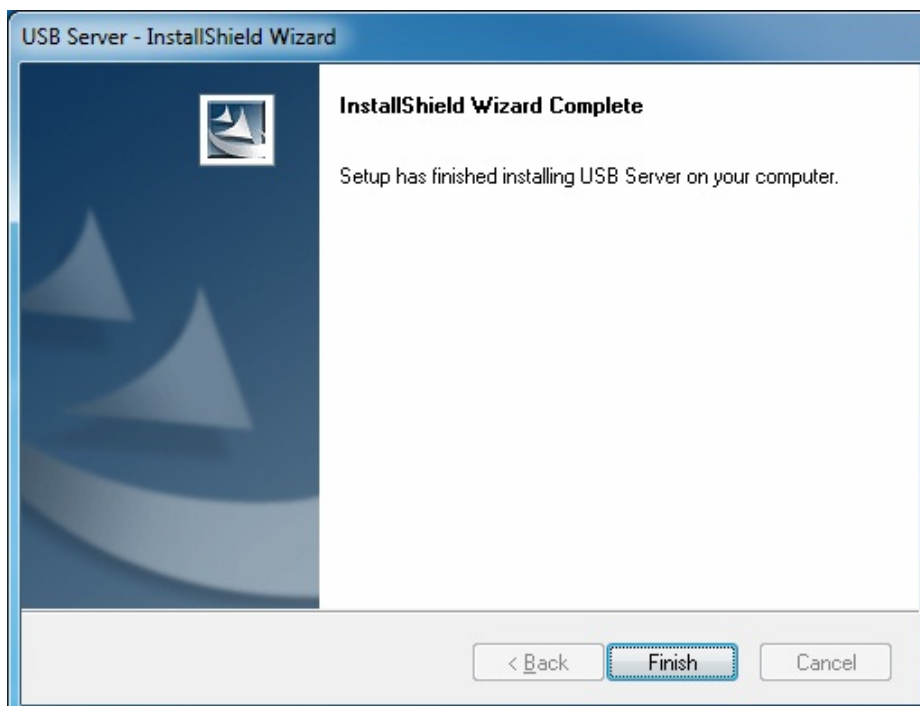


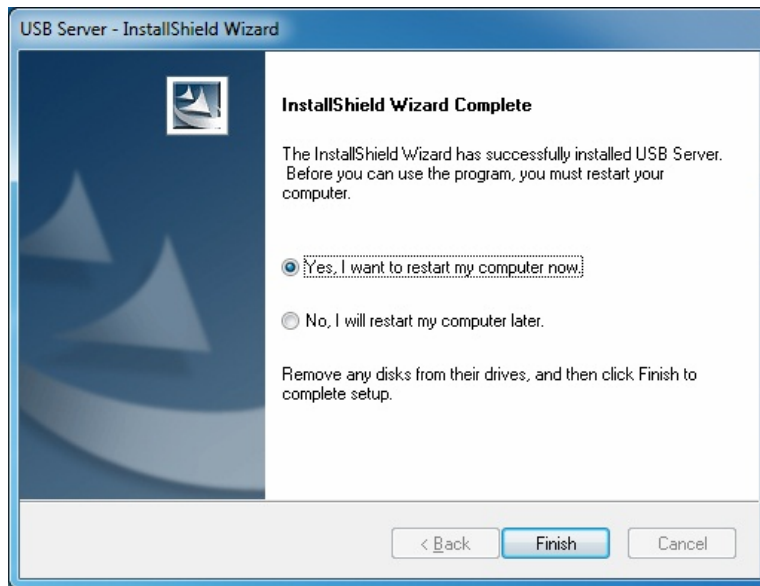5. After DisplayLink software installed, the **USB Server Setup** installation will appear.



Note: The Window Security Windows will appear, please click **Install**.

6. Setup has finished installing USB Server on your computer. Please click **Finish**.

7. Please choose "**Yes, I want to restart my computer now**" and click **Finish**.



8. When the installation is completed. Please restart your system before using HDMI® A/V over Gigabit Ethernet Adapter. You may see the **Launch USB Server** icon on desktop.



9. Please plug power cable into HDMI® A/V over Gigabit Ethernet Adapter and **connect** the Ethernet adapter's LAN port end to a free Router.

The **Windows Security Alert Window** will appear when making connection. Please click **Unblock** or **Allow Access** button to make connection.
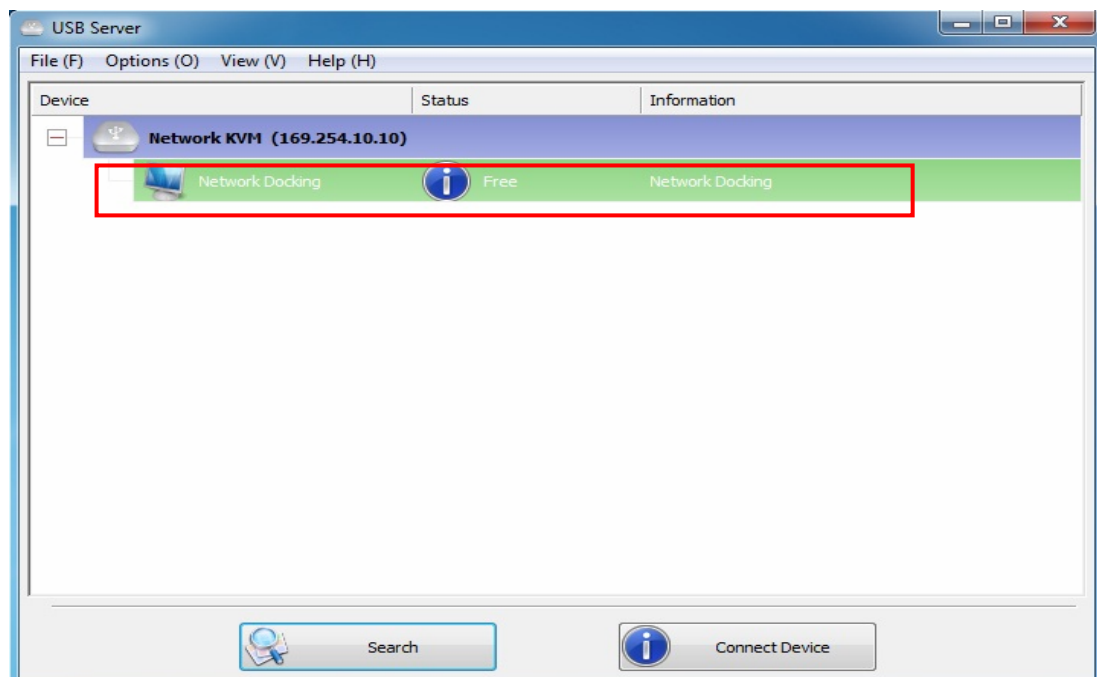
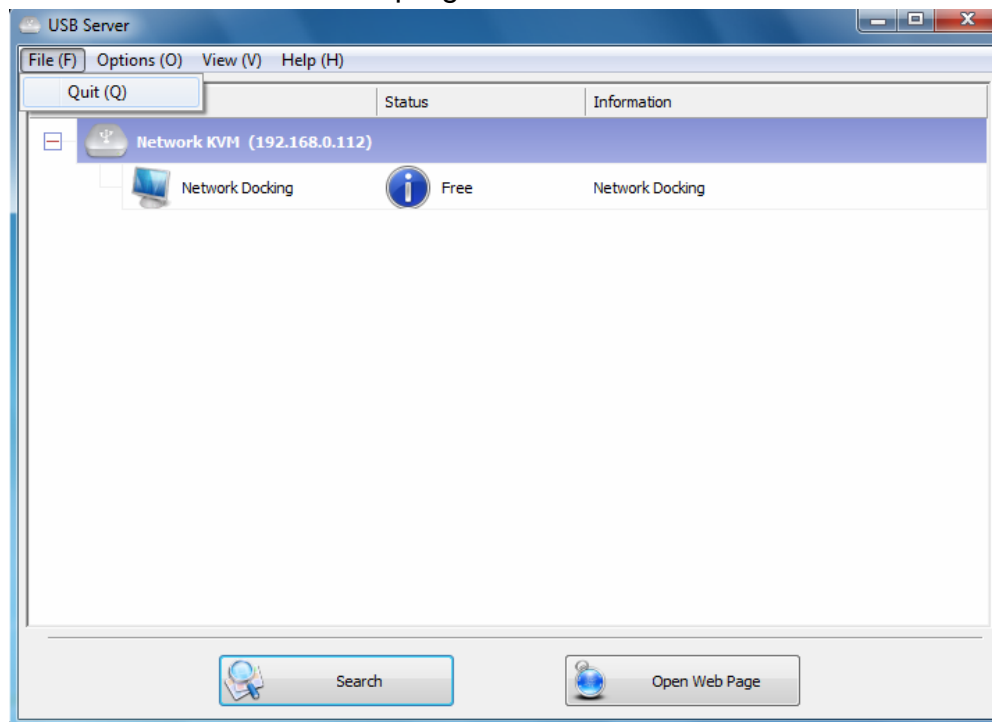10. When the device is connected, the check mark will be green.
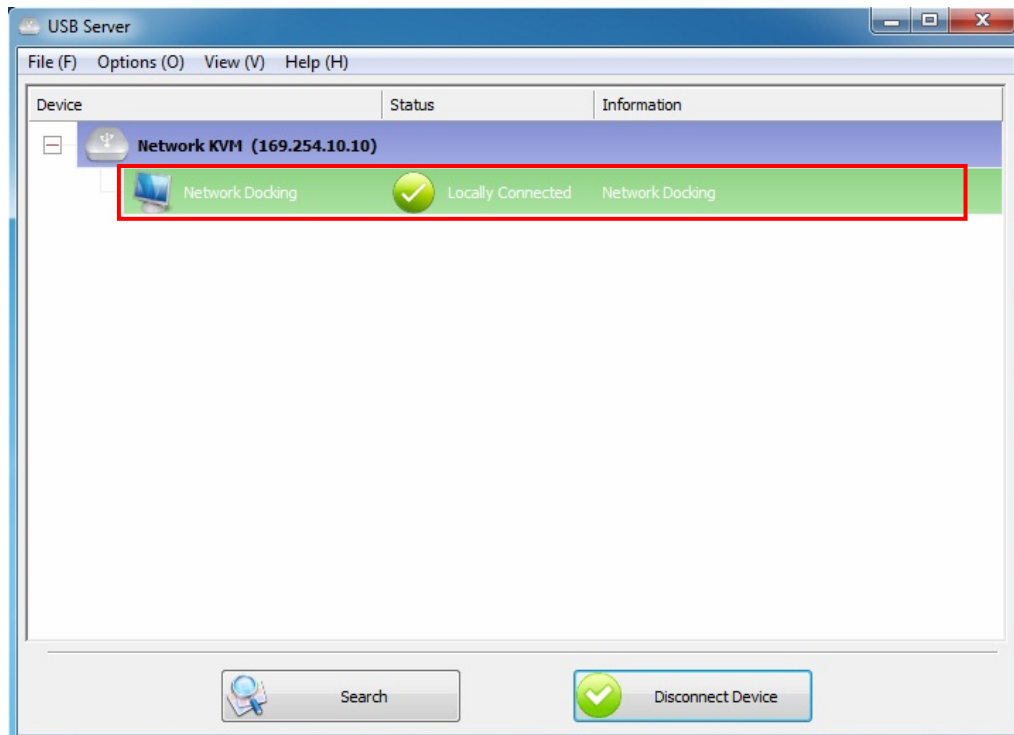


*Actual strings depend on your operation system. These screen shots are from Windows® 7 and might vary slightly for each operation system.

11. If your monitor is not yet connected to the adapter, make the connection and power on your monitor.
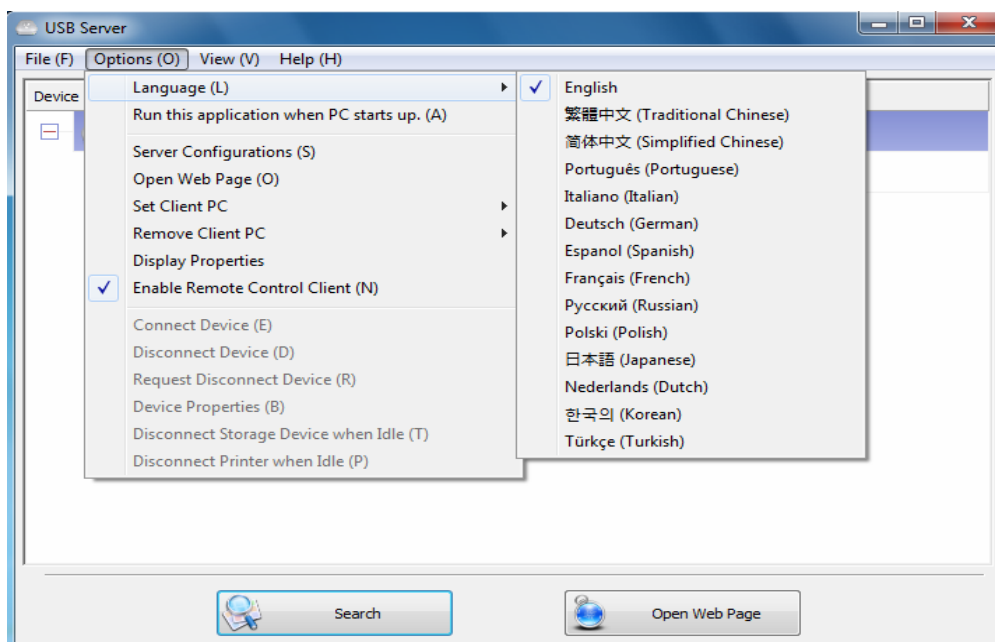
# 3. Application

## ◆ File

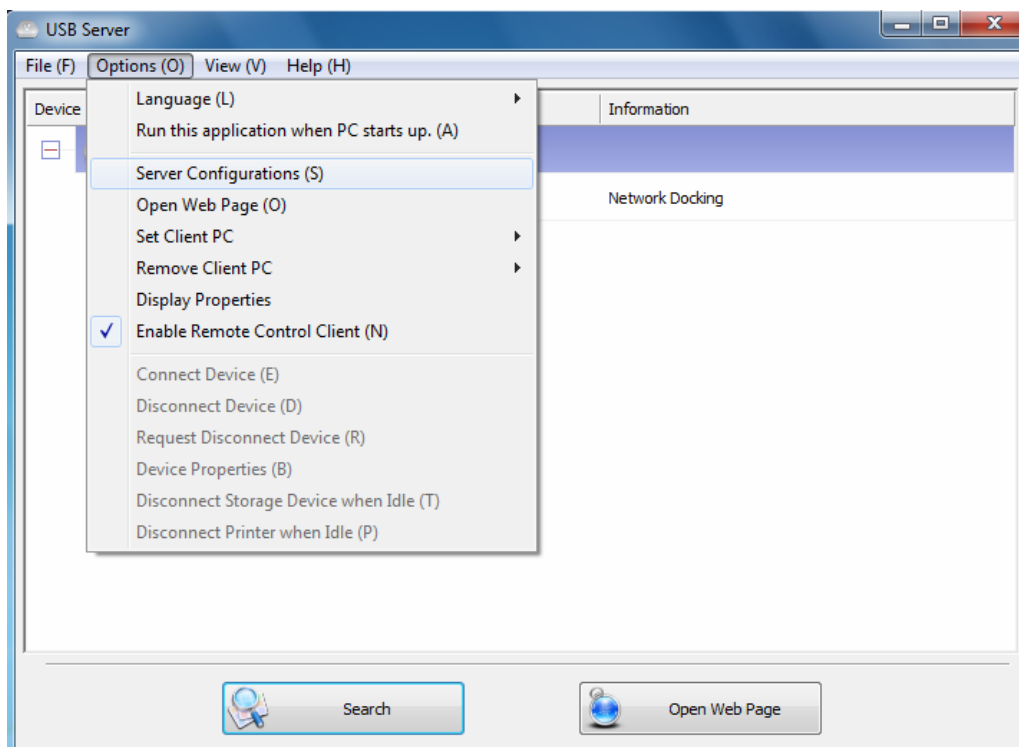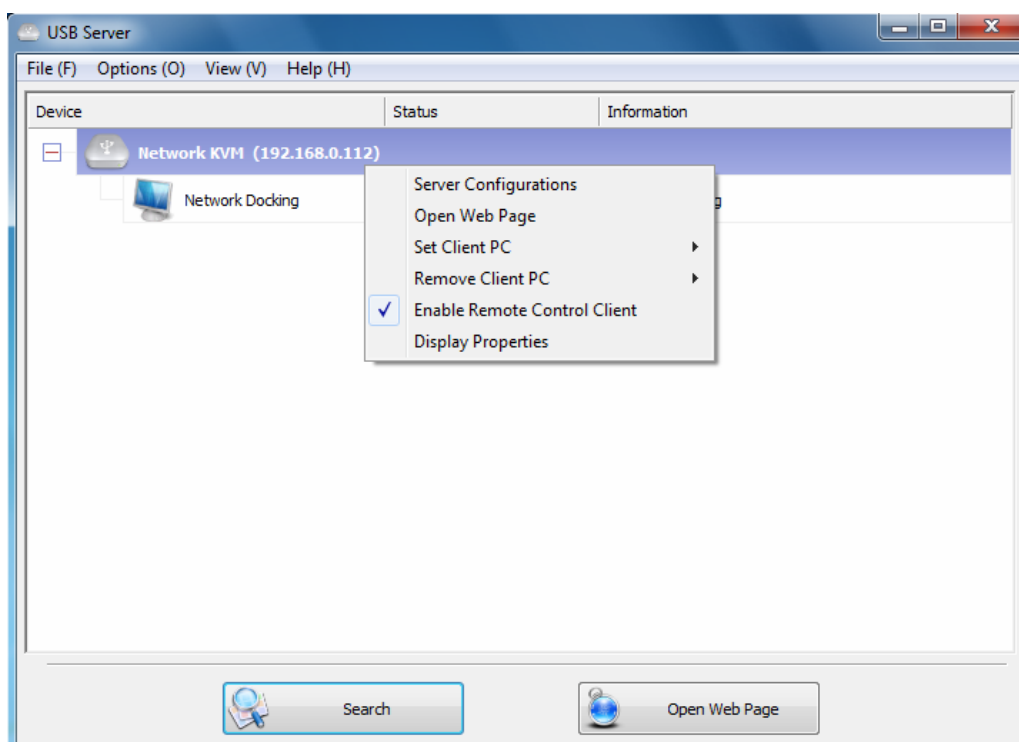The **Quit** function exits the program.



## ◆ Options

1. **Language:** You can change the utility's language with this option. The default language would be the same as your system's language.

2. **Server Configuration**: There are two way to bring up Server Configuration. You can go through **Options Tab** (figure 1) or Right-Click on the server icon to bring up this menu, and select **Server Configuration** (figure 2).



(Figure 1)



(Figure 2)

**Server Name:** This field allows you change the Server name. Change it whatever you want.

**USE DHCP:** When this field is checked, your server acquires IP address automatically. Uncheck it and you can enter IP address automatically.

**Note:** You can apply this function to a server under different network segment. HOWEVER, some router/switch hub does not allow communication between servers under different segment. In this case, you won't even see the server on a different network segment.

**Backup Firmware:** this function is a fail-save mechanism for the Update Firmware function. Just browse to where you want to save the backup file and click on **Save** to save the file.

**Update Firmware:** update firmware with this function. Use the **Browse** button to choose the firmware to update. Click on **Open** to start.

**Change Password:** Simply enter the new password and enter it again for confirmation. Click on **Submit** to change.

**Reset Server:** This button reboots the server. Please note that this function will not work if the server you attempt to reset has a device connected to it and the device is occupied by a user.
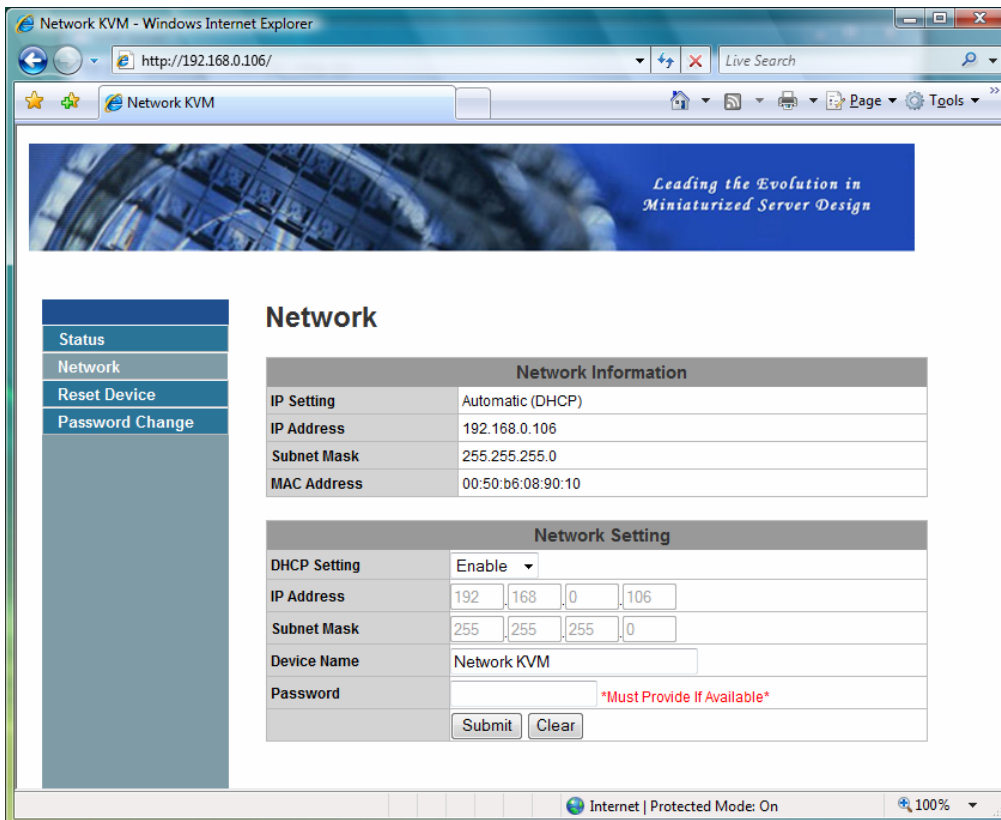
3. **Open Web Page:** Brings up the server's configuration web pages.
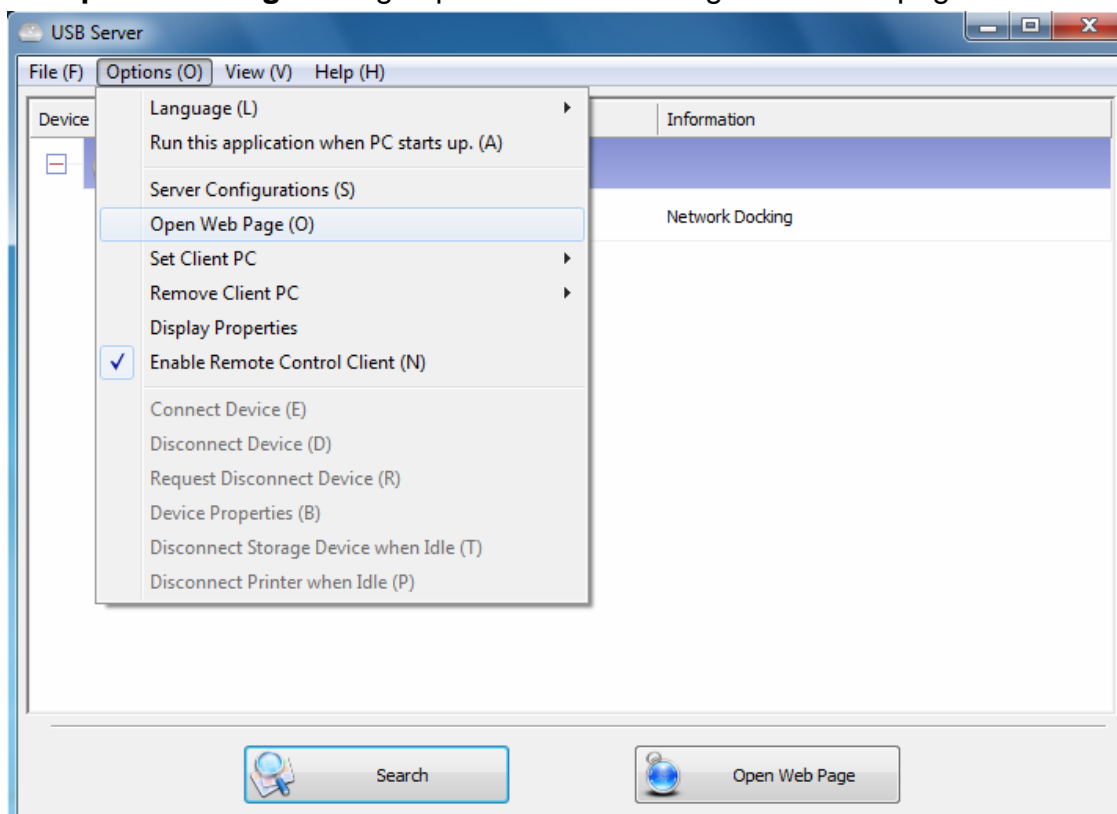


**Status:** This is the main page. You can see the important information about the EST USB Server and the devices connected to it. The 4 links at the left-hand side take you to different pages with other information about this server or functions you could perform.



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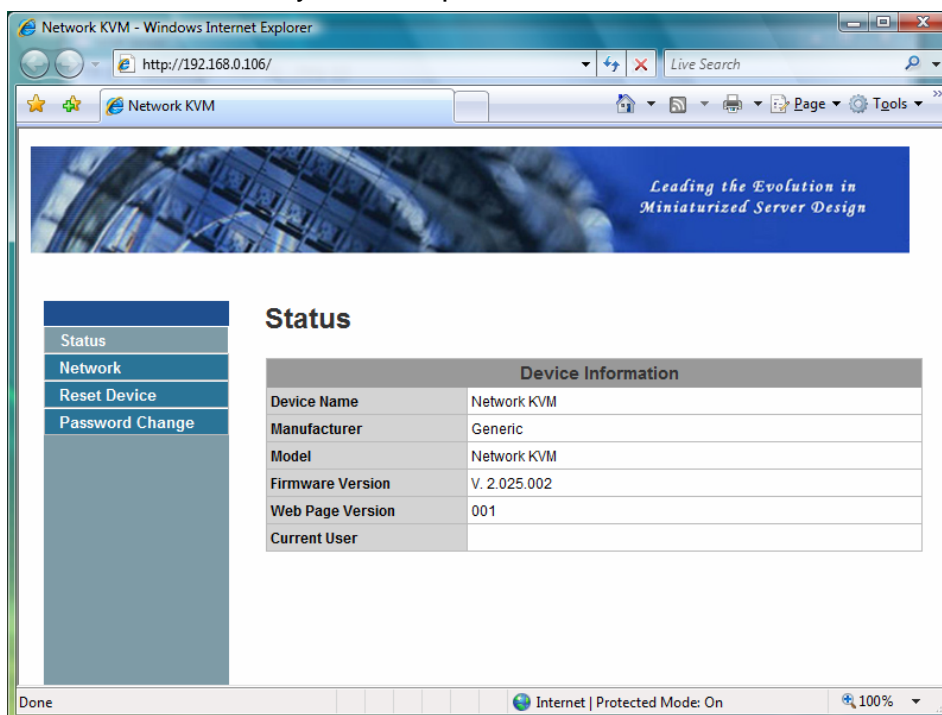
**Network Information:** This page displays the current network setting of the server, like the current IP setting and the MAC address.
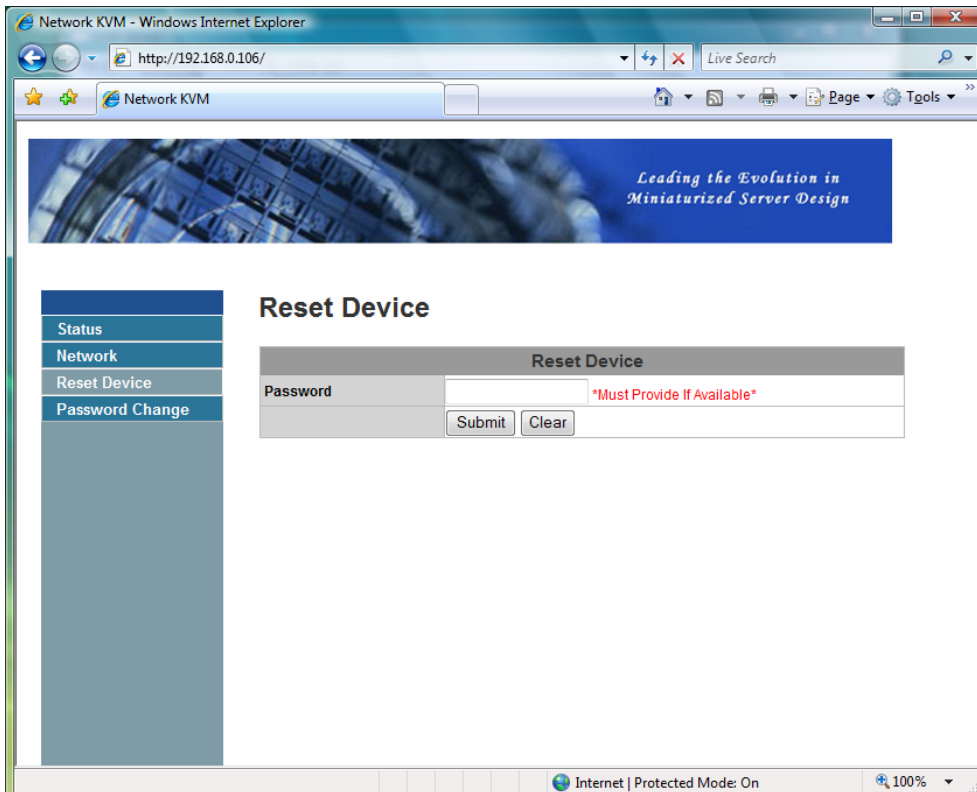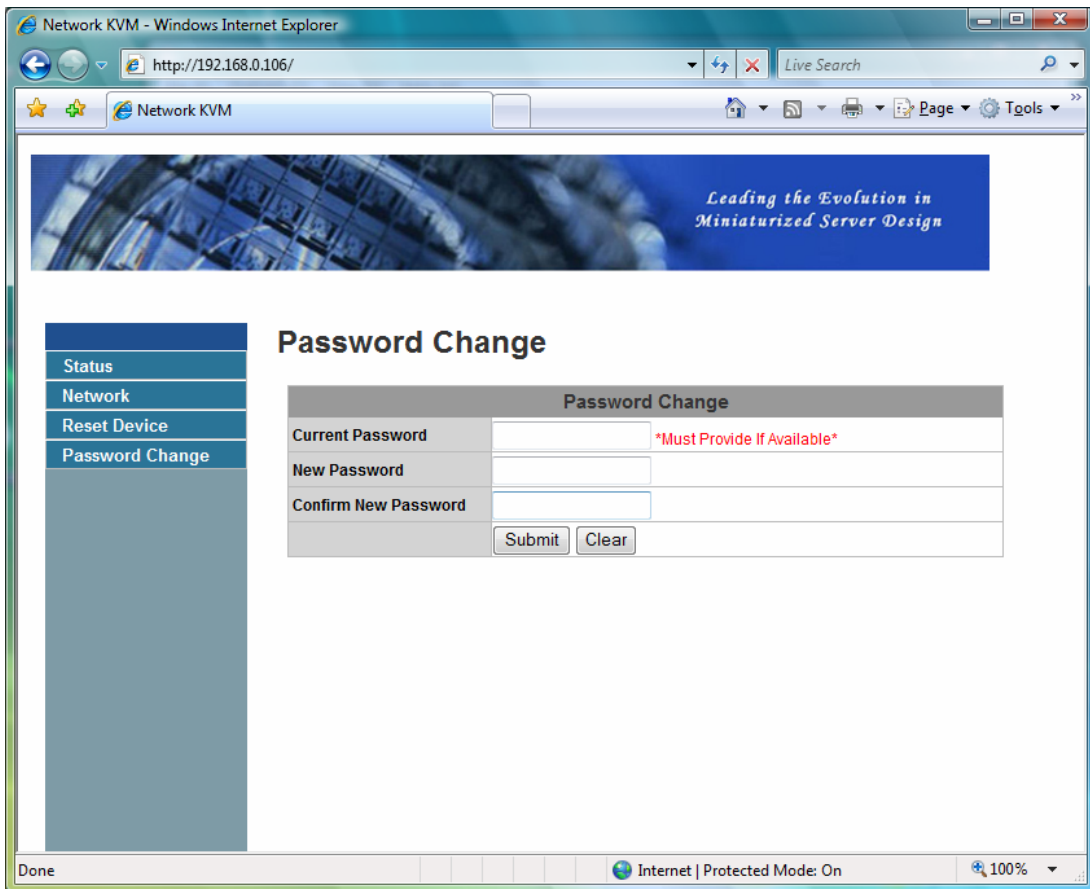


**Reset Device:** Click on the Submit button with the correct password provided will reboot this EST USB Server. If no password has been set, then simply click on Submit button to perform this function.

**Change Password:** To change the password, you must enter current password, enter new password and enter it again for confirmation and the click on Submit to set the new Password. If you are setting the password for the first time, you do not have to provide current password.

4. **Set Client PC:** The first thing you need to do is Setting Client PC as Host. Being a Host allows you to control your PC remotely via this product.
To register, simply right click on the device icon, move the cursor to the Set Client PC option, and select the PC number. Once successfully registered, you can see your PC name appeared on the list.

Note: Please Do not connect device before Setting Client PC.
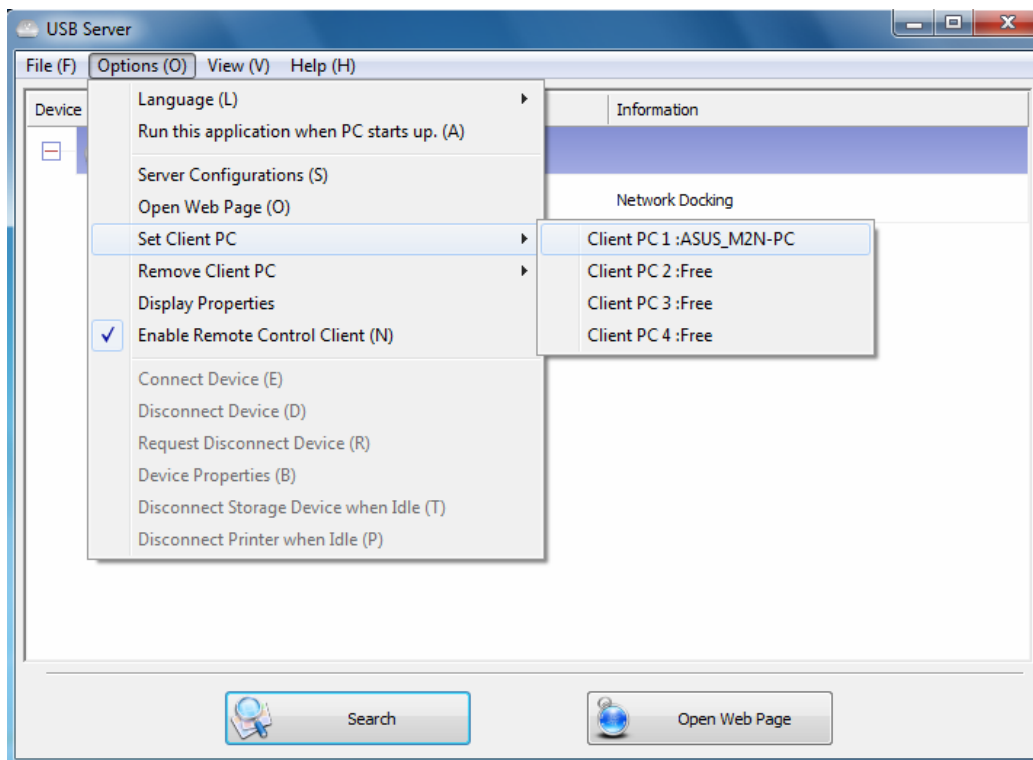


Please remember, at most 4 PCs could be registered on one single product.

5. **Enable Remote Control Client**

You can remotely connect to it with a set of combination key if you have a keyboard plugged into this product. **Remember, you must have the software running on the Client PC to utilize this function.**
Each of the 4 buttons corresponds to a Client PC. Simply press the one corresponding to the Client and wait a few second for the connecting process to complete.
Press **Ctrl+Ctrl+Number**, where Number is the number corresponding to the Client PC you would like to connect.
For example, if you press **Ctrl+Ctrl+2**, then **Client PC 2** will be remotely connected.

*Note: The login screen may appear when you switch one computer to another, please login again to use Ethernet to DVI Adapter.*

6. **Remove Client PC**

At most 4 PCs could be set as a Client on one single product at any time. So, if you would like to set the fifth PC, you must remove a current host, this could be accomplished with Remove Client PC option. Then select the Client PC you would like to remove.
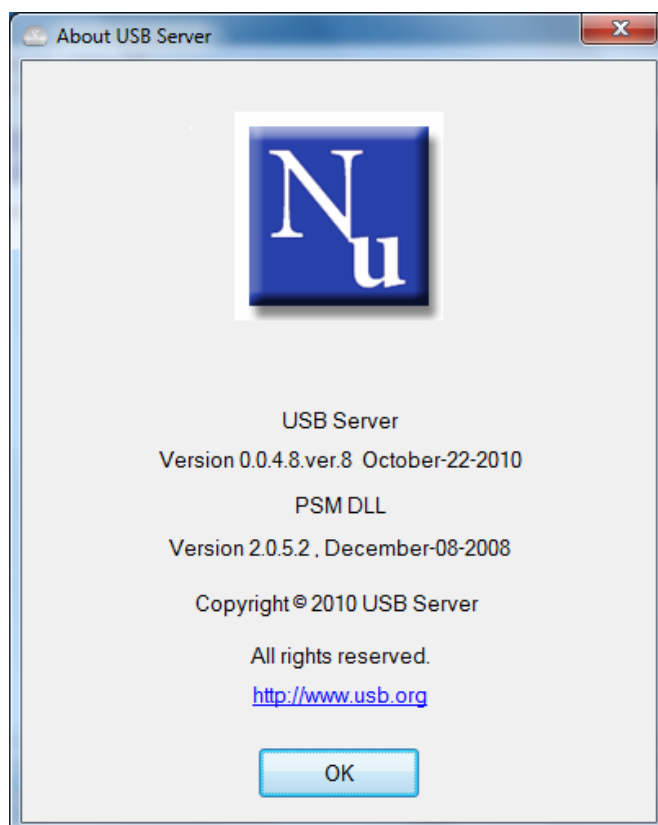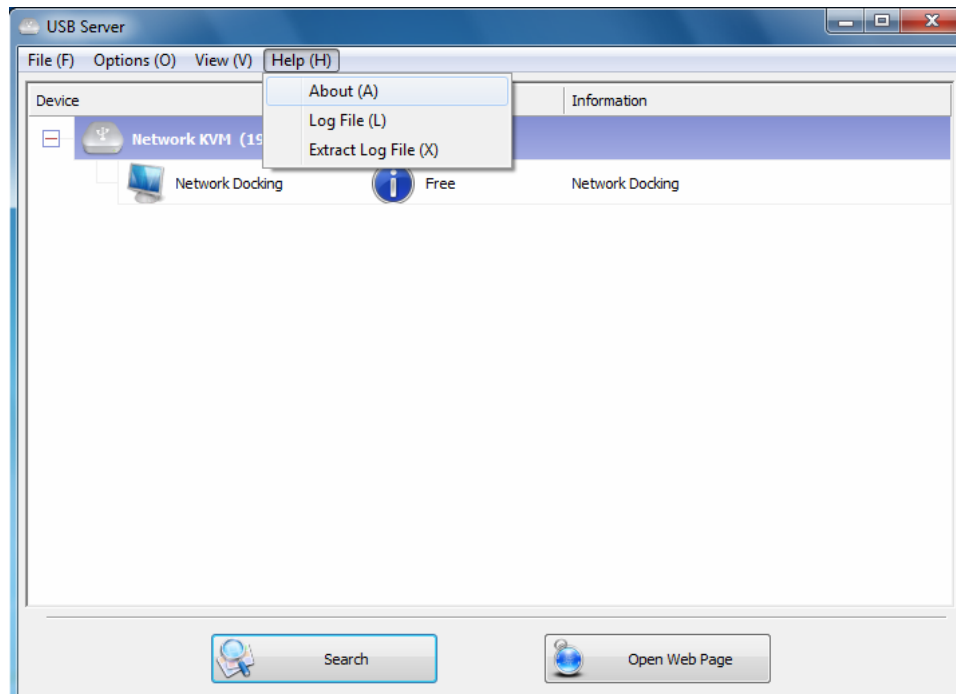


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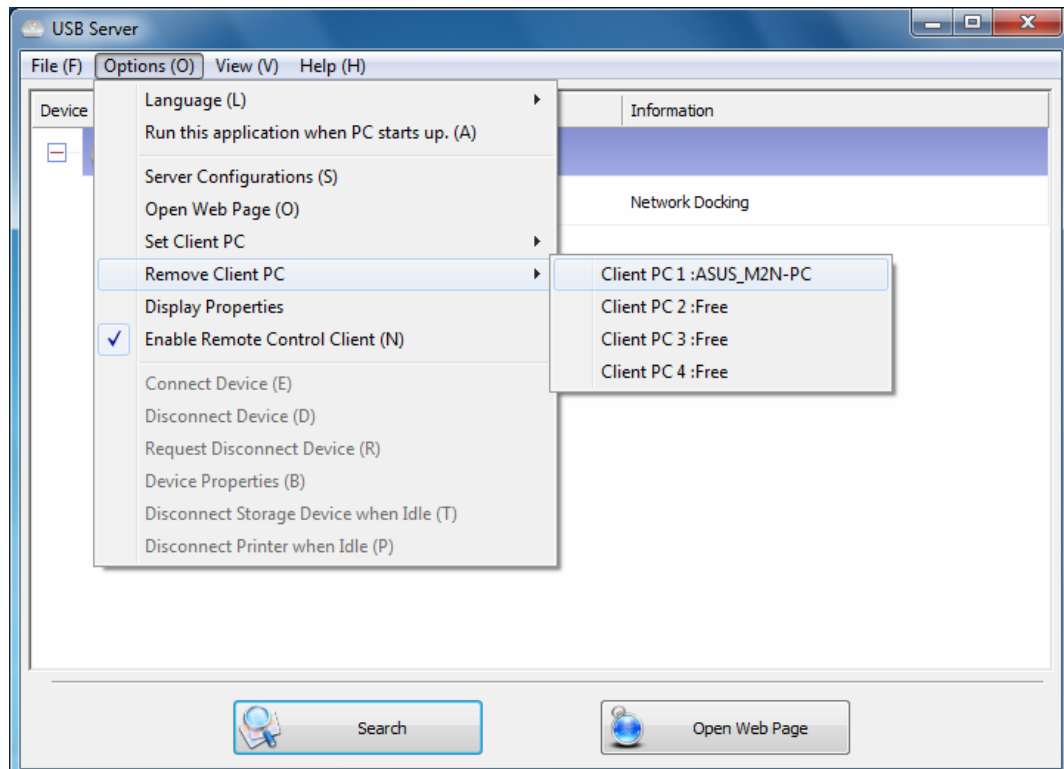
## ■ **View**

The tree view in the main dialog has two display modes: "Servers and Devices" mode and "Devices Only" mode. The default setting is "Devices Only" mode. You can toggle between these two display modes with the View option on the control menu.
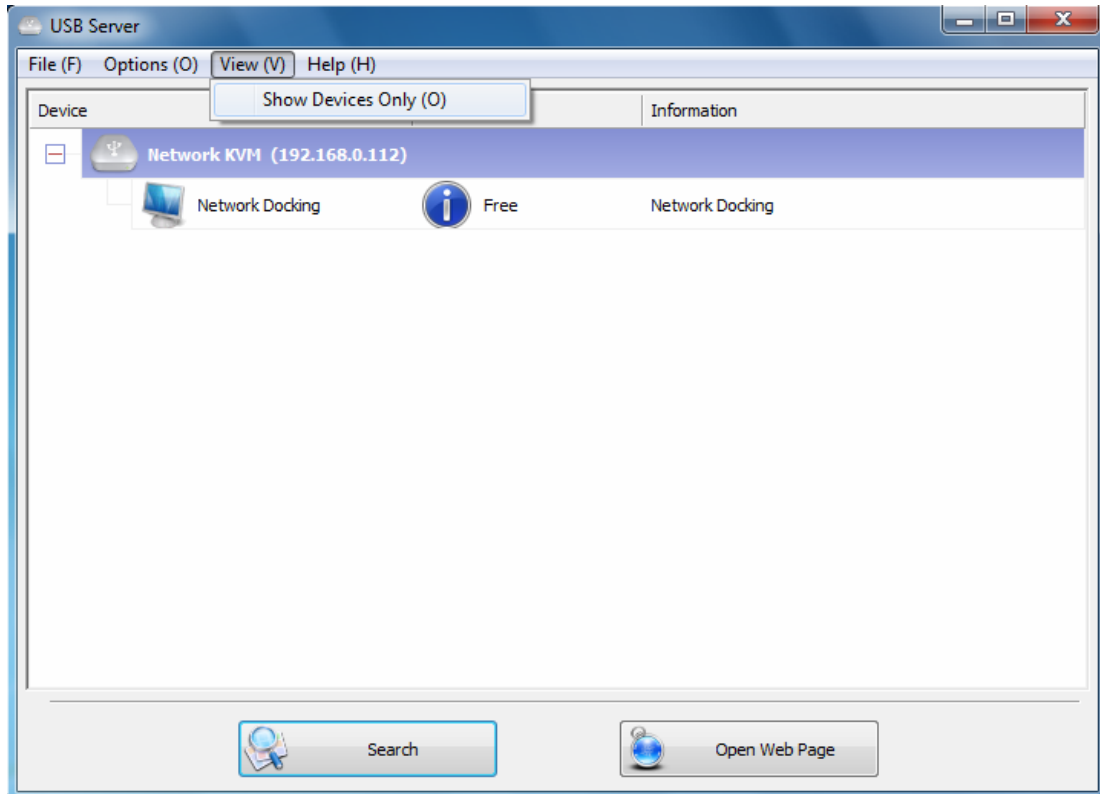
# ■ Help

1. **About:** Bring up a dialog box with legal and other relative information displayed.

2. **Log File:** Enabling Log function allows the USB Server software to generate a log file that records data which might help software developers debug a problem. So if you want to report a bug, enable this function and repeat the steps to reproduce the bug. Once you have seen the bug happen again, you can use the Extract log file function to extract the file and send the file in for analysis.
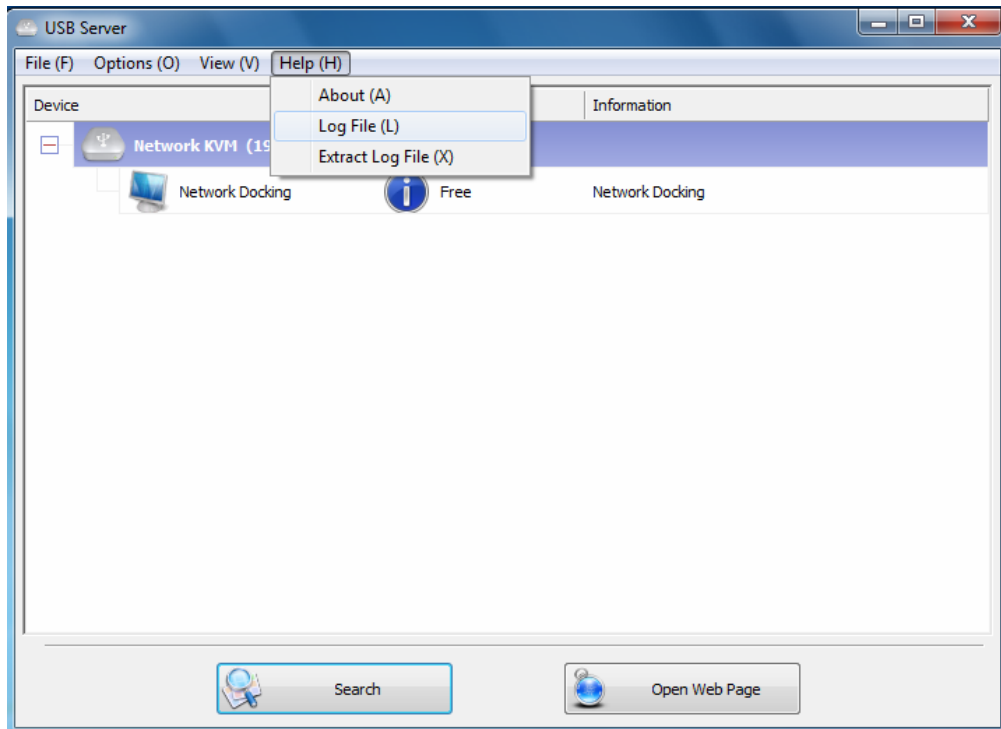


3. **Extract Log File:** Clicking on this option brings up the folder where the log file is kept.
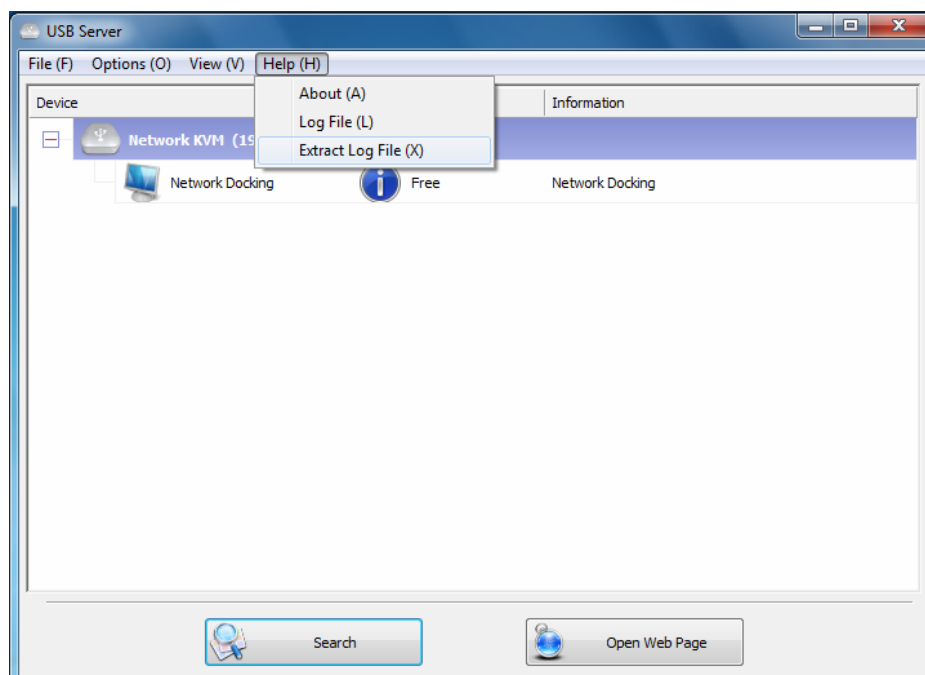
# 4. Display Mode

## On Windows® XP/ Windows Vista®

To change the display mode, please right-click on your desktop and click

**Properties** > **Settings** on Windows® XP, **Personalize** > **Display Setting** on

Windows Vista® or use the icon in the system tray that looks like a monitor as
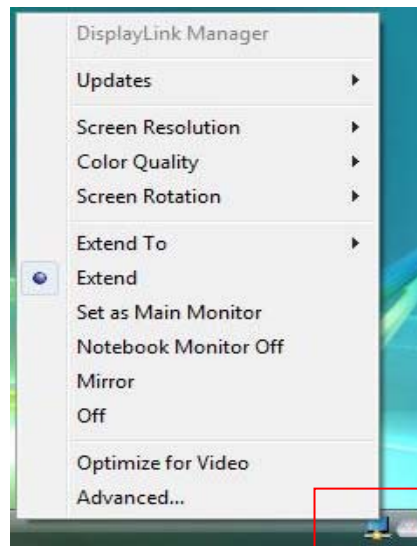
below.

The USB-attached monitor can be configured to:

- Extend your Windows desktop (default)

- Extend your Windows desktop to Right / Left / Above / Below

- Mirror your Windows desktop

- Set as Main Monitor

- Notebook Monitor Off

- Off

**On Windows® XP**         **On Windows Vista®**



There is another way that you can also change extended mode or mirror mode

easily (only for Windows® XP and Windows Vista® users):

Please connect the second keyboard to the device and press **Ctrl+Ctrl+F1**, you

can change the extended mode or mirror mode easily.

## On Windows® 7

1.  You can change the appearance of your displays through the Window. Moreover, additional controls are available in Windows® 7: Orientation (Portrait, landscape, rotated portrait, rotated landscape)
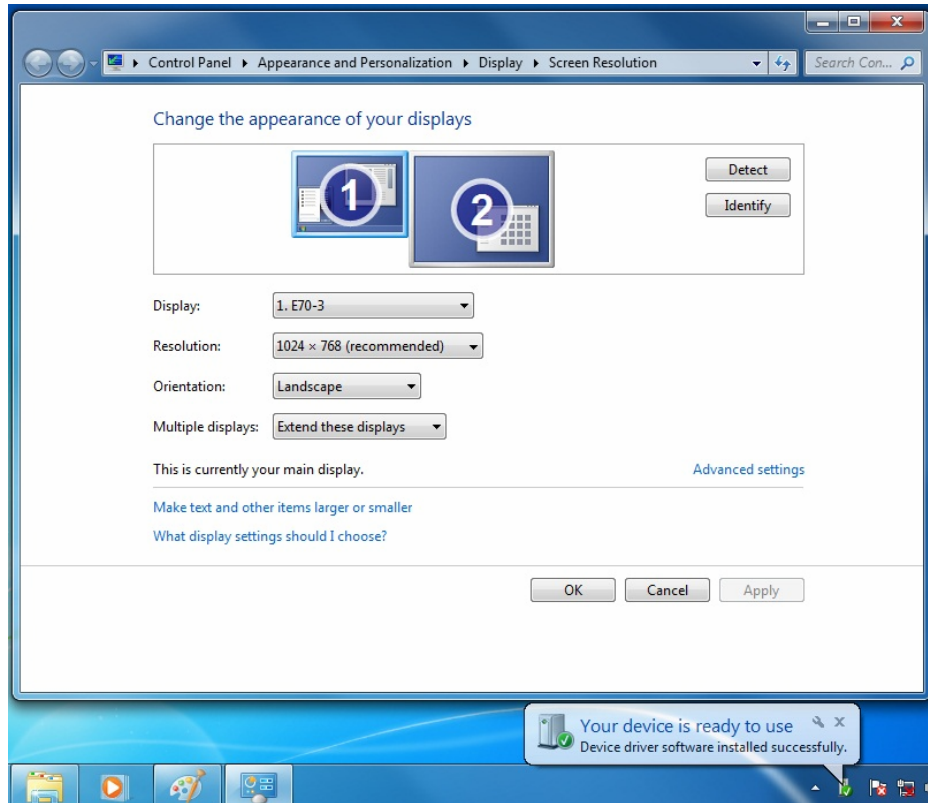


2.  To control the behavior of an attached DisplayLink device (or screen), it is possible to use **Windows Key+P** to display menu (and cycle through it) to allow: Disconnect Projector, Duplicate, Extend, Projector Only.
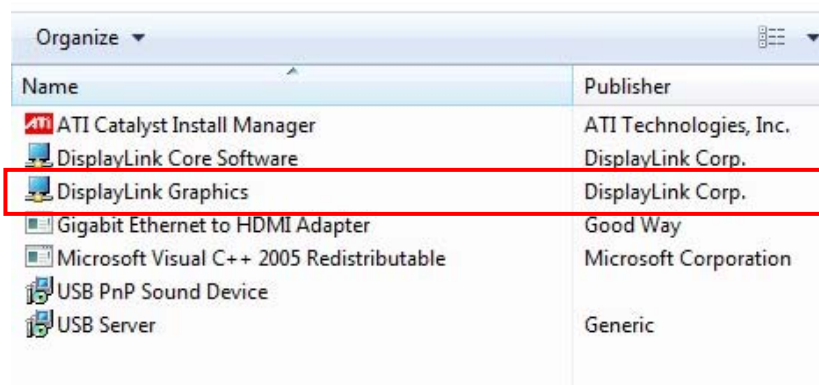


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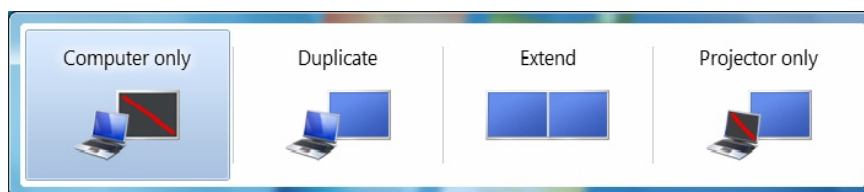
# 5. Uninstall the Driver

If for any reason you want to uninstall the driver, please take these steps:

## Uninstall the DisplayLink Driver

1. Open the **Control Panel** and double-click **Uninstall a Program** on Windows$^®$ 7, **Programs and Features** on Windows Vista$^®$, and **Add or Remove Programs** on Windows$^®$ XP.

2. Select DisplayLink Graphics and click Uninstall or Remove.



3. Click **Yes** to confirm the removal. During the removal process a couple of DOS windows will pop up.
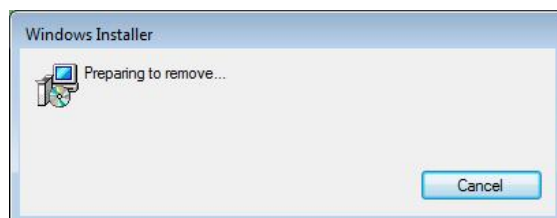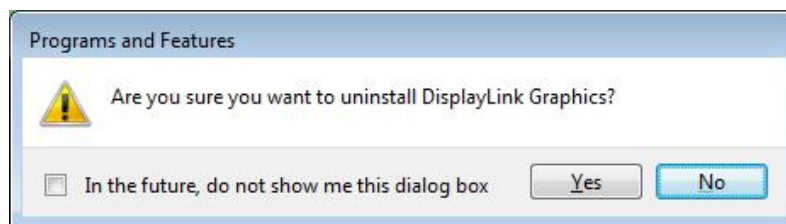




4. Click **Yes** to restart your computer and then unplug the adapter now.



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# Uninstall PnP Sound Driver
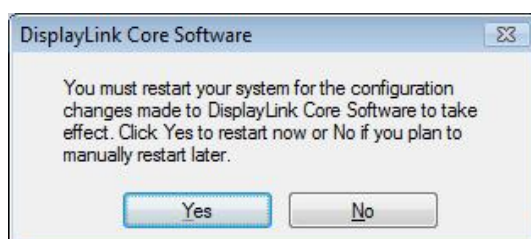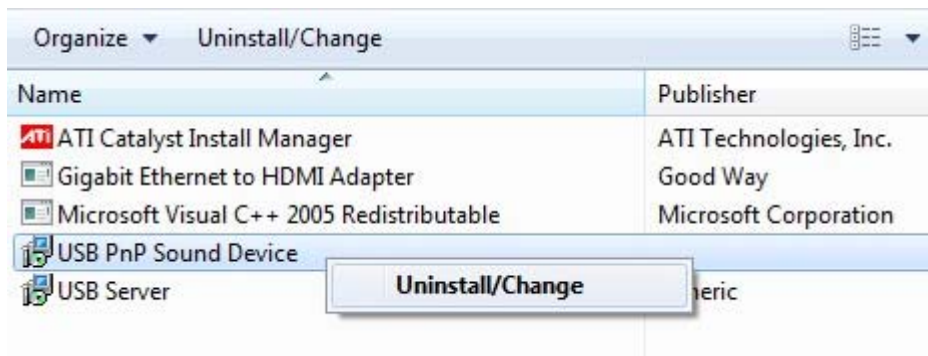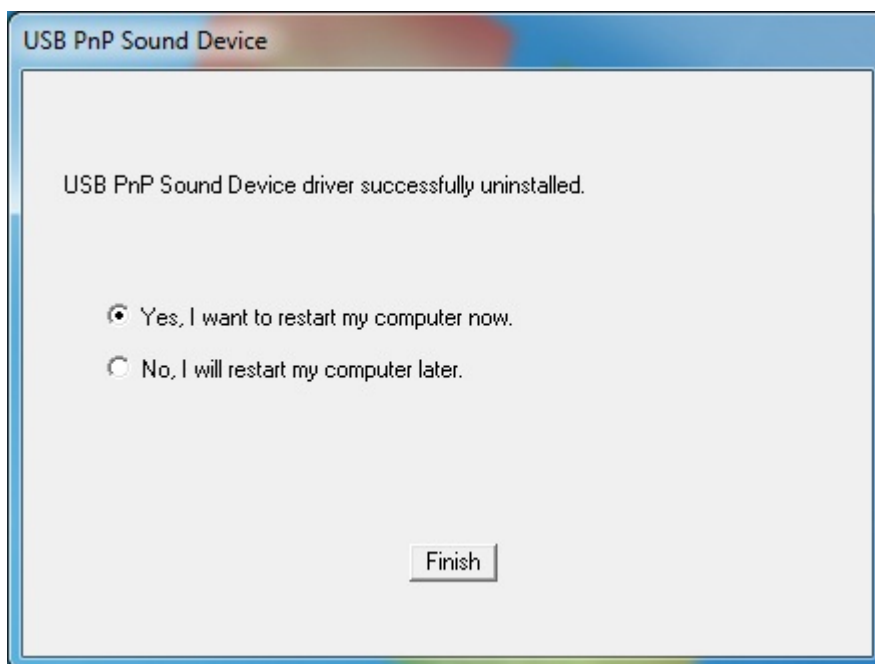
1. Open the **Control Panel** and double-click **Uninstall a Program** on Windows® 7, **Programs and Features** on Windows Vista®, and **Add or Remove Programs** on Windows® XP.

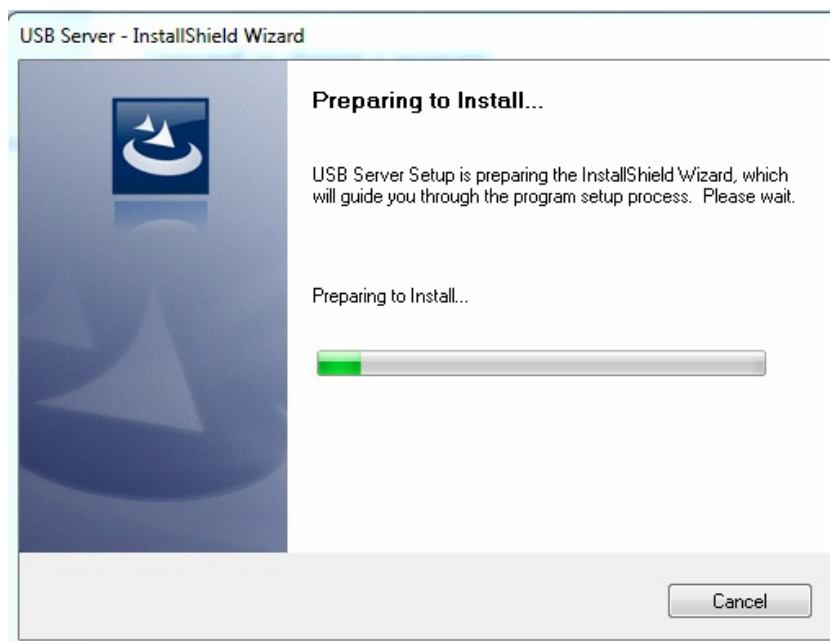2. Select USB PnP Sound Device and click Uninstall or Remove.



3. Please select **Yes, I want to restart my computer now**.

# Uninstall USB Server Driver

1. Open the **Control Panel** and double-click **Uninstall a Program** on Windows® 7, **Programs and Features** on Windows Vista®, and **Add or Remove Programs** on Windows® XP.
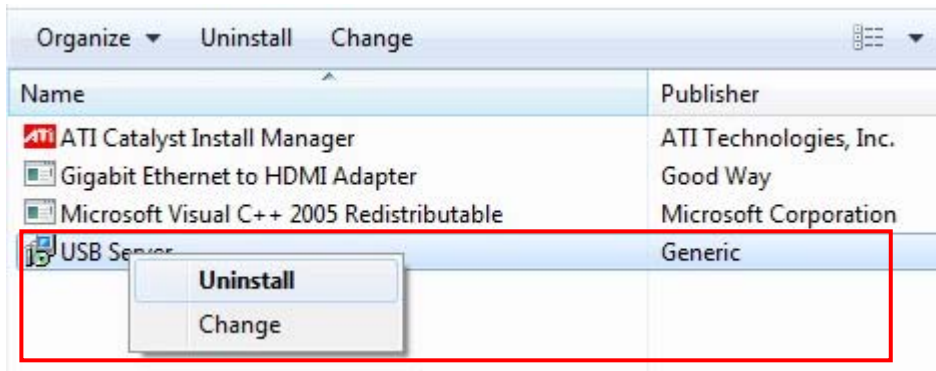
2. Select USB Server and click Uninstall or Remove.


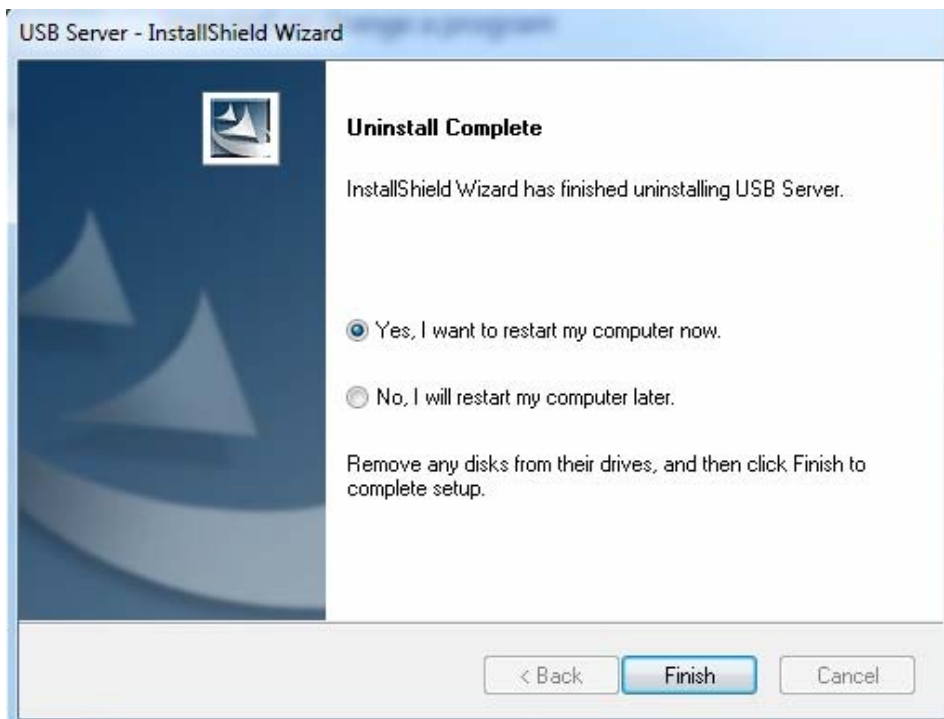
3. Click **Yes** to completely remove the selected application and all of its features.



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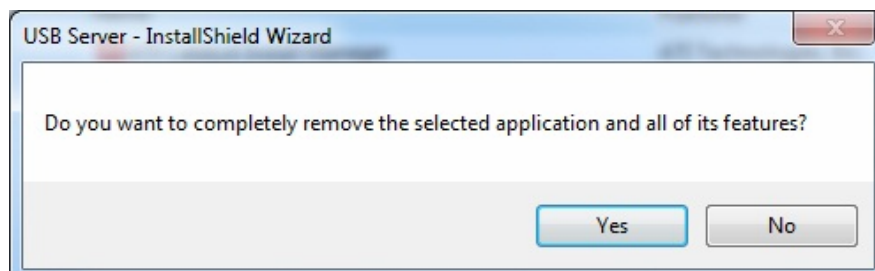
4.   Click **Finish** to exit the wizard.
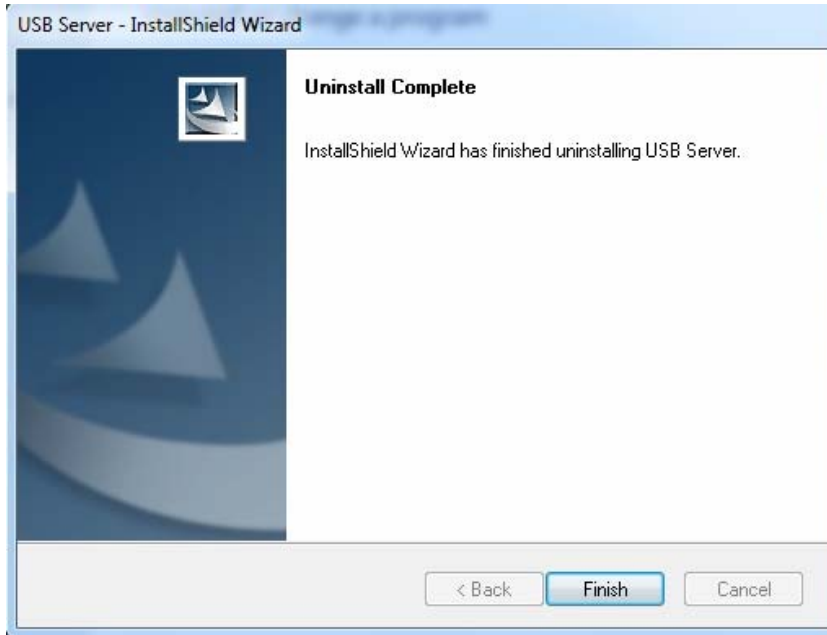


5.   Select "**Yes, I want to restart my computer now**" and click **Finish**.

# 6. Specification

| Function | HDMI® A/V over Gigabit Ethernet Adapter | |
|---|---|---|
| Connector | Gigabit Ethernet port | 1 xRJ45 Female |
| | USB Downstream Port | 2 xUSB A type Female |
| | Video out | 1 x HDMI® |
| | Power | 1 x DC Jack(Black) |
| LED | Power LED | 1x LED (Green) |
| | Link LED | 1x LED (Blue) |
| Video | Video Resolution | 1080 P |
| Power Consumption | Operating Power : 900mA | |
| | Suspend Mode Power : 810mA | |
| Physical Properties | Housing | Plastic (ABS + PC) |
| | Weight | 230g |
| | Dimension | 66.9mm(L)x30mm(W)x142.05mm(H) |

# 7. Regulatory Compliance

## FCC Conditions

This equipment has been tested and found to comply with Part 15 Class B of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference

(2) This device must accept any interference received. Including interference that may cause undesired operation.

## CE

This equipment is in compliance with the requirements of the following regulations: EN 55 022: EMC Directive 2004/08/EC (EN55022/EN55024)

## WEEE Information

For EU (European Union) member users:
According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.